

THE BELT RAILWAY COMPANY OF CHICAGO

System General Order #2024-005

Effective 0001, November 1st, 2024.

To: ALL CONCERNED

Subject: System General Order #2024 - 005

System General Orders are issued by proper authority modifying Rule Books and Special Instructions as required.

System General Orders apply to employees in all departments.

Individual Department General Orders, for department specific rule items, will be

issued when necessary.

System General Order 2024-004 is void.

Percy E Fields President & General Manager The Belt Railway Company of Chicago

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<u>Timetable and Rule Book Modifications</u>: (Changes shown Highlighted.)

BRC Timetable and System Special Instructions #7, Effective April 1, 2020

Add the following to page 5 of BRC Timetable 7.

Areas that require a High Security Lock will now be equipped with a Sargent & Greenleaf Lock that will require the use of a #**102 key** to operate.

Kenton Line:

Speed Restrictions (Turnouts and Crossovers)

Change to read:

Limited Speed = 25 MPH Medium Speed = 20 MPH Slow Speed = 15 MPH

22nd Street Yard

Industry 263 (Tie-Energy) has installed Derails on Track 5 at 22nd Street Yard, derails are located at the North end and South end of the track.

67[™] STREET Interlocking, Signal Changes:

At 67TH STREET, Signals 2R, 4R, 4RA, 2L, 4L, and 4LA are changed from three head mast signals to two head mast signals displaying indications allowing for movement at MEDIUM SPEED in the interlocking.

Where RESTRICTING signals are displayed, these will utilize flashing red aspects in accordance with BRC SSI Rule 9.1.3, RESTRICTING.

A new 2L & 4L signal governing northbound movement on the Main Track will be relocated and placed in service, the new location of the 2L & 4L signals will be 360 feet South of their current location, the 2L & 4L signals will now be displayed over MT 1 & MT 2 on a Cantilever Signal Mast at milepost 10.4, the 2L & 4L signals will continue to display the same signal aspects.

A new 4RA signal governing southbound movement from the 68th ST WYE will be relocated and placed in service, the new location of the 4RA signal will be 300 feet west of its current location, the 4RA signal will now be displayed on the left-hand side of the 68th ST WYE as viewed by approaching trains.

MP 10.7

Show Ind 684 Switch MP 10.7 MT 1 removed.

Rockwell Yard:

Derails [2] have been installed at the south end of Rockwell Yard MP 12.75, these are hand operated hinged derails that are equipped with a 102 High Security lock.

One derail has been installed between the lead and the inside switch for tracks 1 and 2 at the south end of Rockwell Yard.

The other derail has been installed on the lead just south of the Rockwell 3 Switch.

GCOR 8.20 applies.

80TH STREET Interlocking, Signal Changes:

AT 80TH STREET, Signals 2L, 4R, 6R, 6L, 8L, 8RA, 8RD, 10LA, and 10LD are changed from three head mast signals to two head mast signals displaying indications allowing for movement at MEDIUM SPEED in the interlocking.

Where RESTRICTING signals are displayed, these will utilize flashing red aspects in accordance with BRC SSI Rule 9.1.3, RESTRICTING.

Add the following Kenton Line item 4. Under Speed Restrictions

Maximum Authorized Speed of the NS Stack Track is now 15 MPH

Belt Junction Interlocking, Signal Changes:

Effective June 16th, 2023, all signals governing movement into the Belt Junction Interlocking MP 14.3 have been changed to display only two aspects.

87[™] STREET Interlocking, Signal Changes:

At 87TH STREET, Signal 2LA on MT 1 is changed from single head color light signal to a double head color light signal mounted on a new cantilever signal bridge at MP 16.95.

At 87TH STREET, Signal 2R on MT 1 is changed from a three head color light signal to a two head color light signal mounted on a new cantilever signal bridge at MP 16.69.

At 87TH STREET, Signal 2LB on Third Rail Siding is changed from a single head color light signal to a double head color light signal mounted on a new cantilever signal bridge at MP 16.95.

On MT 2 northbound intermediate signal 2930 at MP 16.9 is changed from a signal head dwarf signal to a double head color light absolute signal mounted on a new cantilever signal bridge at MP 16.95.

On MT 2 southbound intermediate signal 2929 at MP 16.9 is changed from a signal head dwarf signal to a double head color light absolute signal mounted on a new cantilever signal bridge at MP 16.69.

New signals at MP 16.69 and MP 16.95 display signal aspects in accordance with BRC SSI Rules; 9.1.1, 9.1.3, 9.1.15 and 9.1.16.

3rd Rail Siding Between 87th st Interlocking and Pullman Junction)

Changes all references to the 3rd Rail Siding length, to 11,500 feet

Rock Island Jct Interlocking:

Effective Wednesday March 6th at 1600 the signals for governing Northbound movement at the Rock Island Jct. Interlocking will be relocated and be displayed on a cantilever mast.

The 2 LA Signal which governs movement northward from the NS Connection track at Rock Island Jct will be relocated approximately 82 feet north from its current position and will now be a two-aspect display mounted on the cantilever mast.

The 4LA signal which governs movement northward from the South Chicago District Industrial Lead at the Rock Island Jct Interlocking has been moved approximately 282 feet to the south, it is now a two-aspect display mounted on the cantilever mast.

The previous three aspect stand-alone signal mast for the NS Connection track and the South Chicago Industrial Lead Track will be removed from service.

59th Street Line

Speed Restrictions (Turnouts and Crossovers)

Change to read:

Limited Speed = 25 MPH Medium Speed = 20 MPH Slow Speed = 15 MPH

55TH STREET Interlocking, Physical Characteristics Change:

MP 0.33F Switch Removed

Switch 17, connection to Elsdon Industrial Lead is removed.

MP 0.35F Crossover

The crossover located at MP .35F has a maximum authorized speed of 20 MPH.

Removal and Addition of Intermediate Signals

Intermediate Signals located on Main Track 1 & 2 at the following locations have been discontinued from service and removed.

MP 1.45F Signal Numbers 162 & 161

MP 1.75F Signal Numbers 164 & 163

A new Cantilever Signal Mast has been installed at MP 2.75F and will support Intermediate signals for both main tracks in each direction. The signals are as follows.

Signal No. 273 for southbound movement on MT 1,

Single aspect, display rule, - 9.1.2, 9.1.15, 9.1.16

Signal No. 274 for southbound movement on MT 2,

Two aspect, display rule – 9.1.2, 9.1.11, 9.1.15, 9.1.16

Signal No. 275 for northbound movement on MT 1,

Two aspect, display rule - 9.1.2, 9.1.15, 9.1.16

Signal No.276 for northbound movement on MT 2,

Two aspect, display rule – 9.1.2, 9.1.11, 9.1.15, 9.1.16

NARRAGANSETT Interlocking Changes:

Removal of Narragansett Interlocking MP 3.1F

The Narragansett Interlocking located at MP 3.13F has been retired and removed from service, all signals controlling movement into the Narragansett Interlocking have been removed. The crossover Switch between MT 1 & 2 has been removed, the Switch for Industry 453 has also been removed.

On Page 12 Timetable #7, remove the "I" under Rule 4.3 for Narragansett Station.

IHB Argo Industrial Track

The IHB Connection Switch Located at MP 3.18F on MT 2 is now an Electric Lock hand operated switch. Prior to operating the Electric Lock Switch permission must be obtained by the BRC North Dispatcher.

- Permission must be obtained from the IHB West Dispatcher prior to occupying the IHB Argo Industrial Track (Channel 058-058.)
- Authority must be obtained from the BRC North Dispatcher prior to entering MT 2 from the IHB Argo Industrial Track.

After movement is complete, the BRC North Dispatcher will make arrangements to have the switch restored for movement on BRC MT 2.

MP 3.75F Removal of Electric Lock & Switch

Show Switch for Industry 458 & 457 located at MP 3.75F removed.

65th st Interlocking, Signal Changes:

The following signal changes have taken place within the 65th St. Interlocking.

4L Signal (Northbound MT 2) at MP 4.5F has been changed to a High Mast Signal and is now on the left-hand side of MT 2 at MP 4.5F.

2R Signal (Southbound MT1) at MP 4.05F has been changed from a Single Aspect Display to a Two Aspect Display. 2R Signal can display Rule 9.1.1, 9.1.3 and 9.1.15

West End West Yard (page 98 Timetable #7)

The BRC North & South Proviso Leads now individually connect to the IHB Main Track 1 within the IHB CP Argo Interlocking.

New signals governing movement from the BRC North & Proviso Lead to the IHB Main Line has been placed in service.

The Location of the signals governing movement from the BRC North & South Proviso to IHB are located appx 850 feet south from previous cantilever signal that controlled movement from the BRC North & South Proviso Leads to IHB.

North and South Proviso Lead Signals are <u>displayed on the left-hand side</u> as viewed by approaching trains.

West Sub Interlocking to IHB (CP Argo)

Show the North & South Proviso Lead tracks as CTC Main Tracks

WEST SUB Interlocking, Signal Changes:

Signals 6LC and 6LA at WEST SUB Interlocking are changed to two head high mast signals.

Departure Distance Markers, West Departure Yard: {see page 9 of G.O. for example of sign}

On the High Side West Departure Lead, the Cabbage Patch Lead, and the High Side West Departure Lead, departing trains may increase speed to **20MPH**, when permitted by signal indication at **WEST SUB** or **65TH STREET**, once the rear of the train has passed the **DEPARTURE DISTANCE MARKER** displayed at these locations.

Elsdon Industrial Lead

BRC Timetable #7 Page 17,

The Elsdon Industrial Lead is Out of Service between 0.0E and MP 1.5E

In the event movement is authorized by an EIC (BRC Chief Engineer) on the Elsdon Industrial Lead, all Highway / Rail Grade Crossings must be protected by BRC System Special Instructions Rule 6.32.2 ACTIVATION FAILURE.

Red flags are displayed at either end of limits.

Connection between Elsdon Industrial Lead and Kenton Line within 55TH STREET Interlocking Limits remains in service.

South Chicago District Industrial Lead

Show former Industry 972 tracks back in service, speed restriction not to exceed 5 MPH on all tracks.

CLEARING YARD

Add the following speeds under

2. Operating Characteristics – OTHER THAN MAIN TRACK(S): (TT Page 7)

All <u>"Light Locomotive Consist"</u> operating In <u>Remote Control Operations</u> within Clearing Yard Tracks are governed by GCOR 6.28 and must **not exceed 10 MPH**.

Maximum Speed for the below locations remains the same,

GCOR 6.28 applies, 5 MPH
GCOR 6.28 applies, 5 MPH
GCOR 6.28 applies, 5 MPH
GCOR 6.28 applies, 10 MPH
GCOR 6.28 applies, 10 MPH

Add the following under Special Conditions (Clearing Yard.) page 24 Timetable #7

Riding Side of Equipment - Prohibited Locations

East Classification yard - Tracks 50 through 56 ECLS

West Classification Yard - Tracks 6 through 8 WCLS

Add the following on page 26 of BRC Timetable # 7,

Under SWITCHES:

The District Lead, 4-12 Pocket / North Thoroughfare switch located within the limits of the BRC diesel Shop area must be lined for the North Thoroughfare when not in use.

A new Left-Handed Crossover has been installed in the BRC West Receiving Yard, this Crossover allows movement to go from the South Thoroughfare to the east end of 02 West Receiving.

The following Crossovers located in the Clearing West Receiving Yard are now set up to operate in correspondence. The 7 Crossover and the 02 WREC / South Thoroughfare crossover when operated from either switch will line the adjacent Crossover switch in correspondence, for safety, each crossover switch has been equipped with a "Wheel Detector," GCOR Rule 8.12 HAND OPERATED CROSSOVERS applies.

Present Detection 04 East Approach:

Present Detection Ends / Begins Signs have been installed on 4 East Approach in the area of the Cicero Ave Overhead Bridge. They have been installed at the area where the detection of equipment on 04 East Approach does not exist. Avoid staging locomotives or equipment within the area between the Present Detection Signs, equipment within the area of the signs cannot be detected.

Remove the following section from BRC Timetable # 7 Page 31

REMOTE-CONTROLLED DUAL CONTROL SWITCHES - WEST END OF EAST RECEIVING YARD

Replace with the following.

The following locations in Clearing Yard have Remote Controlled-Dual Controlled Switches-

The West End of the East Receiving Yard, Tracks O1 EREC through 23 EREC (including Crossovers.)

The East End of the West Receiving Yard, (In Service November 10th, 2023, at 1400) Tracks 01 WREC through 15 WREC (Including Crossovers.)

These switches are not equipped for DTMF radio operation, they are controlled by the Hump Conductor of the receiving yard to which they are assigned, Hump Conductors work under the Direction of the Y ardmaster.

To operate these switches, contact the Yardmaster for which the territory you are operating in.

Switches are equipped with mast mounted indicator lights that display the following indications:

- Green Switch Position NORMAL
- Amber Switch Position REVERSE
- White Route activated.
- Red Switch out of correspondence

In addition to the Remote Operation, the switches are also equipped for push button and hand operation. Switches are equipped with mast-mounted indicator lights reflecting the following.

- Green Switch Position NORMAL
- Amber Switch Position REVERSE
- Red Switch out of correspondence

Special Conditions:

Once the route is lined by the Hump Conductor, the switches cannot be manually operated in the field.

Switches may be operated in hand throw when a route is not lined. Movements must be stopped 125 feet in advance of the switch to be hand operated.

When locking out the switches for protection, Mechanical and Engineering Department employees must obtain permission from the yardmaster prior to locking out the switch. The yardmaster must be advised when the switch is restored to power.

Crossing Restrictions - Clearing Yard and Industrial Leads, (Timetable Page 32)

Remove:

Yard access crossing at West End of East Receiving Yard across East Approach Tracks is equipped with automatically activated crossing protection.

And remove the following five bullet points.

Add:

The use of cameras to protect shoving movements at West End of East Receiving Yard across East Approach Tracks, in accordance with GCOR Rule 6.5, fulfills the requirements of GCOR 6.32.1, Providing Warning Over Road Crossings at this location, and physical protection of the crossing by an employee on the ground is not required.

South Clearing Industrial District

On the South Clearing Industrial District (SCID) 73rd Street Road Crossing is now equipped with Automatic Warning Devices and Gates, (Crossing number 869262K)

SYSTEM SPECIAL INSTRUCTIONS (SSI)

Add the following Rules to the BRC System Special Instructions:

GCOR 2.21 Personal Electronic Devices

Replace Part B, Personal Electronic Devices with the following:

Except when deadheading in other than a controlling locomotive, railroad-operating employees on duty (including supervisors) must have each electronic device turned off and stowed out of sight, with any earpiece removed when:

- On moving rolling equipment or on-track equipment
- Any member of the crew is on the ground performing safety related duties
- Any employee is assisting in preparation of the train, engine(s), or on-track equipment.

A railroad operating employee may use a personal cell phone for voice, data, or text communication only when:

- Rolling and on-track equipment associated with their assignment is stopped
- A safety briefing is conducted with all crew members to confirm that it will not interfere with any safety related or required duty.
- No crew member will foul any tracks.

Personal Electronic Device use is not permitted in the following locations on the BRC:

- East & West Yard Offices
- East & West Hump Offices
- General Office Command Center
- Locker Room Break Area

GCOR 6.4.2 Movements within Control Points and Interlockings (NEW)

Except within track and time limits, whenever a movement stops within an interlocking, the movement must not change directions without permission of the control operator. If the movement stops with the trailing end outside of interlocking limits, change of direction does not require permission from the Control Operator, except permission is <u>ALWAYS</u> required to make a forward movement after a reverse movement. When making movements within a control point or interlocking, GCOR 9.5.7 (SSI) applies when the movement is stopped within one locomotive length of a signal. To reverse direction, or to make a forward movement after a reverse movement within interlocking limits requires either:

A. A proceed Indication from an Interlocking Signal, and there is no switch between the leading

end of the movement and the signal.

B. Verbal permission of the Control Operator.

Where multiple changes in direction are needed for a movement, the control operator may grant permission for multiple movements, ensuring that blocking protection is provided within the limits of the movement's authority.

Trains granted permission to make multiple reverse movements must notify the control operator when the permission for multiple reverse movements is no longer required. Further movement after the reverse movement(s) will be verbally authorized by the control operator.

Clearance Markers:

The BRC is installing markers to indicate the Clearance Points on tracks, the cross ties at the location of the marker may also be painted orange in color to assist with identifying the location of the Clearance Point Marker.

Clearance Point Markers are identified as being an orange cylinder cone 8 inches in height with a reflective tape around it and bolted to the center gauge of track. In addition to the orange cylinder cone with reflective tape, railroad cross ties may also be painted orange to help indicate and make clearance points more visible.

All equipment must remain clear (towards the inside of the track- see picture) of the orange cylinder when left on a track, moving equipment must stop short of the orange cylinder cone and not proceed until the switch to the track is properly lined for movement off the track.

In the event there is no orange cylinder cone (Clearance Point Marker) on a track, employees must comply with GCOR 7.1 (Switching Safely and Efficiently) to determine that equipment is properly left the required distance beyond the clearance point.



Remove the following from BRC Timetable #7 pg. 46.

GCOR 6.5.1 Remote Control Movements (Supersede)

Rule 6.5.1 found in GCOR eight edition effective April 1st, 2020, applies.

GCOR 7.4 Precautions for Coupling or Moving Cars or Engines (Addition)

When operating in Remote-Control Locomotive (RCL) operations, prior to coupling to equipment, light locomotive(s) consist must come to a complete stop within one (1) car length or fifty (50) feet of equipment to be coupled, and a visual verification must be made of the coupler alignment. After complete stop and verification of coupler alignment is made, select "Couple Speed" on Operator Control Unit (OCU) box, and proceed at couple speed for coupling of equipment.

GCOR 7.6 Securing Cars or Engines (Addition)

Make the following changes / addition to GRADE SECUREMENT CHART – CHART, BRC Timetable and SSI, Page 53 as noted below:

- Clearing Yard "Stone Pit Track" Requires all handbrakes to be applied when leaving equipment within the Caution Signs (see page 15 of this GO) located at each end of the unloading portion of the track.
- On Kenton Line, change RULING GRADE between CRAGIN and 14TH STREET to read 0.25%.

GCOR 7.6.1 Unattended Locomotives (New)

If necessary to leave a locomotive(s) on main track, or other than a track designated for tying up, or setting off locomotive(s), permission must be obtained first from the Terminal Manager. When leaving locomotives outside of Clearing Yard unattended (with or without cars) all locomotive(s) in the consist must be secured with a handbrake.

Hump assignments that are securing equipment for the purpose of being transported to the hump tower will be required to apply one handbrake on the locomotive consist, the RCO Electric Handbrake (when equipped) must be utilized for this.

GCOR 7.7 Kicking or Dropping Cars (SUPERSEDE)

Kicking rail cars is only permitted at the following locations on the BRC:

- Hump end of a Classification yard when assignments are trimming classification yard tracks.
- East Departure Yard, tracks 35 through 47.
- Clearing District Yard.

When kicking cars, crew members must ensure that cars to be kicked are clear of and will remain clear of next track to be entered before track is fouled. Prior to kicking cars crews must verify that there are a minimum of two cars secured with Handbrakes in the track that cars will be kicked into.

Dropping cars on the BRC is prohibited.

GCOR 7.10 Movement Through Gates or Doorways (SUPERSEDE)

Change the last sentence in GCOR 7.10 to read as follows:

Do not ride on side of a car, engine, or other equipment when moving through gates, doorways, or similar openings.

GCOR 7.11 Charging Air Brakes (Supersedes)

Replace the following in the BRC TTSI as shown below:

Use of Air Brakes:

- The use of train air brakes when humping is only required when locomotive consist is a single or double unit and humping cars from the West Receiving Yard into the East Classification Yard.
- When pulling a cut up and over the hump, to be humped in the opposite direction (*Northbound* or *Southbound* as an example) air must be applied to **100 % of the cars** handled.

When handling RIP Releases or pulling hold tracks out of the Classification Yards to hump:

• No minimum air brake requirements apply.

When pulling cars from a Classification Yard to a Departure Yard:

• 10% air is required.

Where minimum air brake requirements are specified, cut in additional air brakes, when necessary, whenever the ability to control the movement is not sufficient.

When operating within the limits of **Rockwell Yard** the following items apply with the use of air brakes.

• Crews working in the BRC Rockwell Yard must have the train line air applied to the entire consist of equipment they are handling, the train line air must be cut in, charged, and operable on the entire cut of cars they are handling. This will also apply to crews that are performing switching operations within the limits of Rockwell Yard.

GCOR 7.14 Track Structure Fouled with Snow or Debris (NEW)

On other than main track, and in yards and industries, employees switching must examine tracks for excessive amounts of snow, ice, and debris in flangeways, or over the top of rail that may result in a derailment.

When snow and ice are observed building up on portion of track to be used, particularly at road crossings, locomotive(s) must precede movement on that portion of track.

Employees are prohibited from riding the leading car of shove movements over crossings, or at locations where the ground surface is even with the top of the rail, anytime significant amounts of snow, ice, mud, or any other debris is observed in the flangeway.

When these conditions are observed, employees must dismount and stand clear of the movement until the leading end has passed over the location.

GCOR 8.20 Derail Location and Position (SUPERSEDE)

Change entire rule to read:

Employees in train, engine, and yard service must know the location of all fixed derails. A train or engine moving on or entering tracks where fixed derails are located, must stop at least 100 feet from derail in derailing position.

Movement must not continue until the derail is placed in the non-derailing position. However, the distance restriction will not apply in engine servicing areas.

Do not make a movement over a derail in derailing position.

Sidings having hand-thrown derails will have derail locked in non-derailing position, except when engines or cars are left unattended on siding.

On auxiliary tracks, other than siding, except when derails are placed in non-derailing position to permit movement, make sure they are always in derailing position regardless of whether cars are on the track they are protecting. Lock all derails equipped with a lock.

Derails that are used in conjunction with Rule 5.12 (Protection of Occupied Outfit Cars), Rule 5.13 (Blue Signal Protection of Workmen), or for roadway worker protection must be in the derailing position only when their use is required for such protection.

When their use is not required for protection:

- Remove portable derails.
- Lock fixed derails in non-derailing position with an effective locking device.

Where derails are used to provide protection in conjunction with Rule 5.13 (Blue Signal Protection), or Roadway Worker Protection, a flag must be displayed, in conjunction with the derail, whenever the derail is in the applied position.

When a derail is not equipped with a permanently mounted flag, do the following:

- Display red flags in accordance with Rule 5.4.7, Display of Red Flag, when providing roadway worker protection.
- Display blue flags in accordance with Rule 5.13 Blue Signal Protection of Workmen.
- Display a properly colored light on the derail flag, when equipped.

Flag requirements apply to both fixed and portable derails, in the application of this rule.

GCOR 9.5.7 Stop Signals at Interlockings and Control Points (NEW)

When a movement stops within one locomotive length of an interlocking signal, it must not proceed without verbal permission of the control operator.

GCOR 10.3 Item A. Passing Signal Displaying Stop or Stop and Proceed indication.

Replace Item A. with the following:

Except at Automatic Interlockings, Trains granted Track and Time:

- 1. After stopping at a signal displaying a STOP indication (SSI 9.1.1, page 74 BRC Timetable #7,) must be granted verbal authority from the control operator to enter the limits, trains must move at Restricted Speed.
- 2. May pass a signal within the limits displaying a STOP AND PROCEED indication (Intermediate signal, SSI 9.1.2, page 74 BRC Timetable #7) without stopping.

GCOR 18.1 Positive Train Control Territory (ADDITION)

BRC trains will not operate with PTC unless directed by proper authority.

Foreign line trains operating with PTC, on or over BRC trackage, are governed by the provisions of BRC CORA Updates, BRC Transportation General Orders, and Track Bulletins, as issued by proper authority.

ITEM 11 – BRC SPEED SIGNALS (TTSI Page 74)

9.1.3 RESTRICTING:

Aspects shown apply when displayed on a signal with, or without, a number plate.



Roadway Signs: (TTSI Page 78)

Add the following Roadway Sign to the Chart on Page 78:



See Appendix A of this document for new map pages to add to Timetable #7, Item 13.

BRC HM-1 (Hazardous Material Instructions), Effective January 1, 2022:

Effective January 1st, 2022, a New BRC Hazardous Material Instruction HM-1 is in effect for BRC Employees.

BRC Safety Rulebook SAF-1 (Effective January 1, 2017)

Make the following modifications to the BRC Safety Rules as noted below:

S 11.2.5 Hump Retarders (SUPERSEDE)

Change rule reference from 50 Feet to 150 Feet

S 11.5.4 Abrasives / Cutting / Welding PPE Requirements (New)

PPE Requirement Table		<u>Operation</u>				
		Electric Arc Welding	Oxy-fuel Cutting/Heating	Thermite Welding	Abrasive Cutting and Grinding	
	Goggles (1)		X (2)	X (3) (4)	X (5)	
	Face Shield (1)		X (2)	X (3) (4)	X (5)	
	Safety Glasses	х	Х	X (3) (4)	X (5)	
m	Welding Hood (1)	х			X **	
E Ite	Hearing Protection	х	Х	х	Х	
dd	Leather Welding Gloves	х	Х	X (6)		
	Work Gloves			X (6)	Х	
	Welding Jacket	Х	Х	х	Х	
	Leggings / Spats *		Х		Х	

Abrasives / Cutting / Welding PPE Requirements

Minimum Requirements

(1) Refer to Rule SAF.18.2.1 - Eye Precautions for proper shading.

(2) Wrap-around face shield \underline{with} goggles or safety glasses (one must be shade #5).

(3) Wrap-around face shield with goggles or safety glasses (one must be shade #5) when monitoring thermite weld preheat and pouring process.

(4) Wrap-around face shield with goggles or safety glasses are required for removing molds and cleaning weld.

(5) Wrap-around face shield $\underline{\text{with}}$ goggles or safety glasses (shade #5 lens must $\underline{\text{NOT}}$ be worn).

(6) Leather welding gloves are required while removing the clamp, jackets, and slag pan. (Standard gloves are required while packing the molds)

* Both (L & R) leggings / spats are required to be worn.

** Approved welding hood with grind mode can be used as an alternative to required eye protection when abrasive grinding.

S 11.7.3 Footwear PPE Requirements (SUPERSEDE)

When working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole of the foot or an electrical hazard; protective footwear as defined in OSHA Standard: 29 C.F.R. § 1910.136 is required.

All footwears worn as safety footwear for the purpose of complying with Rule 11.7 must meet the requirements of ASTM 2413.11 which specifies requirements for a built-in safety device and safety toes.

Individual departments may specify additional requirements.

Compliant footwear is required for employees in the following departments:

- Transportation
- Mechanical
- Engineering (Track and Signal)

S11.7.5 Winter Footwear (SUPERSEDE)

BRC employees are required to wear approved winter footwear whenever snow or ice is present on the ground or forecast to occur during the assigned work shift.

Employees subject to this rule are required to have approved studded overshoes, or studs that overlay their work footwear, readily available for use when weather conditions require.

Information regarding procurement or replacement of winter boots can be obtained from a supervisor.

S13.3 Drivers Responsibility (Addition)

Add the following: Unattended vehicles must have the engine turned off. The ignition key must be removed, windows closed, and doors locked.

S17.8 Power Supply Turned Off (SUPERSEDE)

When performing work near a 2,400 volt or greater power line that will not permit the clearance outlined, notify the electrician to switch power off to that portion of line. Do not start work until electrician says that the power has been switched off. Make sure the electrician understands not to switch power on again until advised by the supervisor in charge of the work.

S17.9 Handling Electrical Power Supply Wires (SUPERSEDE)_

Immediately report electrical wires found broken crossed or on the ground to the train dispatcher or proper authority. Do not consider any electrical wire dead until positive information has been received that is safe to handle.

S17.10.1 Lock Out Tag Out; LOTO Definitions (ADDITION)

Add the following:

In the application of Lock Out/Tag Out rules, the following definitions apply:

Authorized Employee – An employee who utilizes LOTO equipment for protection to service or maintain equipment.

Affected Employee – An employee who is required to utilize machines or equipment on which servicing is performed using LOTO, also applies to an employee who is in the vicinity of the equipment while servicing is being performed.

Other Employee – An employee who is within the area where LOTO is being used and within 25' of any equipment being protected by LOTO.

Lock Out Tag Out (LOTO) – A system to isolate electrical current. When an electrical panel is equipped with a disconnect device, it must be locked out. When an electrical panel is not equipped with a disconnect device, a tag may be utilized.

Lock Out Tag Out (LOTO) Device – a required multiple lock hasp, and associated tags, providing a space for each individual employee to apply a lock and tag.

S17.10.2 General Control of Electrical Energy (ADDITION)

Prior to utilizing LOTO Procedures, understand the following:

- 1. Type and size of energy sources to protect against.
- 2. Whether proper multiple hasp LOTO devices are present to allow for effective isolation.

S17.10.3 Lock Out/Tag Out Procedures (ADDITION)

When an employee is working on any 120, 240, or 480-volt equipment connected to a potentially energized circuit, and there is any possibility of a portion of the power feeds becoming energized, LOTO must be used.

To utilize LOTO, do the following:

- 1. Identify all sources of electrical energy.
- 2. Notify other employees within the work group of the status of power and the need for LOTO.
- 3. Shut down affected equipment. Assure circuit breakers and Main Disconnect are off.
- 4. Isolate affected equipment using available disconnect devices.
- 5. Apply LOTO protection, utilizing a BRC authorized LOTO Kit (refer to SAF-1 17.10.3)
- 6. Release any stored energy remaining in the machine.
- 7. Verify isolation, APPLY METER TO VERIFY THE ABSENCE OF ELECTRICAL CURRENT.
- 8. Service Equipment. Do not bypass any LOTO protection during the process.
- 9. Release LOTO upon completion.

When utilizing LOTO with more than one employee, use an LOTO device equipped with multiple locks. Each member of the work group utilizing LOTO must apply their own lock to the multiple lock device.

The pulling of fuse, the powering off a circuit breaker, or other means of isolation not employing LOTO are not alternatives to following LOTO procedures.

Employee names must be affixed to LOTO tags.

Employees are responsible to maintain the LOTO keys personally, these must not be shared or given to other employees.

Employees may not utilize LOTO tags or keys belonging to another employee.

S17.10.4 Temporary Release of LOTO for Testing (ADDITION)

When necessary to test equipment being protected by LOTO, do the following:

- 1. Ensure tools and materials are clear of equipment to be tested.
- 2. Ensure other employees are clear of the equipment.
- 3. The Authorized Employee only can now remove the LOTO protection.
- 4. The Authorized Employee may now energize the equipment.
- 5. If any adjustments are required, after the removal of LOTO protection, LOTO protection must be reapplied by the Authorized Employee prior to conducting any additional repair or adjustment.

S17.10.5 Group Lock Out/Tag Out Procedures (ADDITION)

When utilized, group LOTO protection must afford protection for each employee in the group. Protection must be equivalent to the protection that would be afforded if individual protection were used for each employee.

Each Authorized Employee must affix a personal LOTO device before work begins and remove it when work is completed. Application and release of LOTO devices must be done individually. When a group elects to utilize Group LOTO Procedures, one Authorized Employee must be designated for the purposes of LOTO protection.

If necessary, due to emergency or other circumstance, and after notifying a supervisor of the facts, the Authorized Employee in charge of LOTO for the group, may remove the LOTO of a missing employee.

- 1. When this occurs, all remaining members of the workgroup must be present.
- 2. When necessary to utilize this procedure a written statement of facts must be provided to the supervisor at the earliest opportunity.

S17.10.6 Transfer of LOTO Protection (NEW)

When necessary to leave the area where LOTO is provided, and transfer LOTO to another employee, LOTO protection for the new employee must be applied prior to removing the original protection.

S17.11 Power Supply System Knife Switch/Disconnect Securement (NEW)

All Power Supply System Knife/Disconnect Switches used on signal equipment must be left in the ON position, except in emergency situations.

When equipped, Power Supply System Knife/Disconnect Switches must be locked.

When electrical cases are equipped with a master circuit breaker, that breaker will be left in NORMAL (ON) position, except when maintenance is required, or in an emergency.

Signal Department employees will ensure that snow blower and Cal-Rod equipment is powered ON or OFF using the individual circuit breakers in the signal cases or bungalows.

S19.21.1 SIGNAL MAST INSPECTIONS (NEW)

Prior to climbing a signal mast, inspect the junction box at the base of the signal for cracks, and the ladder for damage.

Focus inspection to identify any stress cracks around the junction box, any damage to bolts connecting the mast to the foundation, and the area connecting the mast pole to the junction box/base.

Inspect the ladder for damage and ensure that brackets securing the ladder to the signal pole are not broken.

If damage is found on either the signal junction/mounting box or the ladder, it must be marked with a red tag/tape on the ladder's terminal lock.

The Signal Supervisor will be notified immediately of the location, signal name and location of the damage.

Shift turnover must include information about any location identified as having damage.

When red tag/tape are observed on a signal ladder, the ladder must not be used.

S20.1.2 Precautions near Passing Trains and Equipment (ADDITION)

Add the following bullet:

• Engineering Department employees may stand on one track, when a train is passing on another track, only when the track they are standing on has been identified as a Designated Place of Safety in the On-Track Safety Briefing.

S20.2.1 Step Over Rail (ADDITION)

Add the following additional instructions:

Before walking across any track, ensure that there is the appropriate amount of time required to do so to allow the employee to be safely across and clear of the track before a train or on-track equipment would arrive at the crossing point.

When walking across any track, move directly and promptly across the track.

20.2.2 Sufficient Distance (SUPERSEDE)

Unless otherwise authorized, when crossing/stepping foul of tracks, employees must not:

- Cross or step foul of tracks closely in front of or behind moving equipment,
- Go between standing equipment if the opening is less than 100 feet.
- Cross tracks unless there is at least 50 feet between the employee and the equipment, when 3-Point Protection is applied per SAF-1 20.5.4 on the attached equipment only, minimum distance would not apply.

Unless otherwise authorized, employees must separate equipment at least **100 feet** when it is necessary to make adjustments, including opening a knuckle by hand.

Mechanical Employees may go between or around the equipment in less than the specified distance provided the equipment is protected by GCOR Rule 5.13 (Blue Flag Protection), and the employee knows that no movement will be made. (MECH) 20.2.3 Sufficient Distance (Classification Yards) In Classification Yards, additional safeguards are necessary when required to work between or on the end of equipment.

S20.2.3 Sufficient Distance (Classification Yards - SUPERSEDE)

In Classification Yards, and other locations where cars are likely to roll together, additional safeguards are necessary when required to work between or on the end of equipment.

In Classification Tracks (Bowl Tracks,) or other locations where cars are likely to roll together, separate cars by at least **100 feet** before opening a knuckle.

When necessary to open a knuckle do the following:

- When necessary to physically manipulate any component, except the uncoupling lever, ensure not less than 100 feet of separation is provided.
- Utilize the uncoupling lever and minimize the time that any portion of the body is in the foul of the equipment.

In Classification Tracks, or other locations where cars are likely to roll together, separate cars by at least 100 feet, and apply sufficient hand brakes, <u>but not less than 1 on the unattached portion</u>, to prevent equipment from rolling, before performing any work between cars.

S20.4.2 Moving Equipment (TRANS) (Addition)

Transportation Department employees, in switching and transfer service, may board and detrain from moving equipment when the following conditions are met:

- Equipment is moving at not more than 4 MPH.
- The ground, at the point of boarding or detraining, is clear of snow, ice, or other debris.
- The employee is wearing safety footwear as prescribed by SAF-1 11.7 Footwear.
- Employee has a minimum of one year working in the Transportation Department and has been qualified by a company manager to board and detrain from moving equipment.

Transportation Department employees must only entrain or detrain from moving equipment when it is safe to do so.

When weather conditions require the use of winter footwear, employees are not permitted to board or detrain from moving equipment.

All conditions and precautions for boarding and detraining moving equipment safely, as shown in SAF-1 Rule 20.4.2, Moving Equipment, apply to Transportation Department employees who board and detrain from moving equipment.

S20.5.4 Understanding Between Crew Members Before Fouling Equipment (Three-Point Protection)

Remove the following Bullet Point:

• The employee must notify all crew members. However, notification is not required when the primary RCO opens knuckles during switching operations.

S20.7.7 Riding Locomotive Cranes and Work Equipment (ENG) (SUPERSEDE)

Replace the entire rule with the following:

Operate equipment only if you are authorized and trained. Operators are responsible for machine safety and machine maintenance.

When working on or about equipment and machines:

- Read and understand the machine's operating manual before using the equipment.
- Use lockout/tag-out procedures.
- Lower all suspended loads and attachments before leaving the machine.
- Do not sit or lie underneath a machine, except when inspecting or repairing the machine.
- Do not overload equipment.
- Be aware of power lines overhead and underground.
- Secure unattended equipment from movement and potential theft.
- Prior to entering Travel Mode ensure all moveable parts and equipment (Booms, Attachments, Etc.) are locked in place and locks are tested for proper securement.

Never place yourself under a raised machine, supported only by a jack.

S20.7.8 Separation During Travel (ENG) (ADDITION)

Add new rule:

Follow these minimum guidelines when working with multiple machines to travel and perform work related to Engineering Department projects and tasks:

- When necessary to slow or stop any machine during travel, the operator must signal adjacent machine operators either by radio, if equipped, or hand signal.
- If using radio to give advice to adjacent machines, the operator must assure that the transmission has been received and is understood.

- Hand signals, when used, must be continuous, until it has been verified that the adjacent machines have observed, and understood that the movement will be stopped or slowed.
- When multiple machines are being used in the performance of normal tasks, which is identified as "Work Mode", the spacing between machines will be maintained to prevent contact between machines or personnel, but not less than 50 feet apart.
- When work conditions or travel conditions dictate that spacing be less than 300 feet while traveling, or 50 feet while working, the machine operators and the supervisor responsible for the work group must have a thorough understanding of the specific task and conditions under which the task will be performed.
- When machines are bunched, fueling or tie up as examples, or when making movements across
 railroad crossings at grade or interlockings, all employees must stay clear of the track. When
 bunching of machines is required, the lead machine operator of the movement will dismount his
 machine and position himself so that he is visible to the following machine operators and anyone else
 who has the potential to stop in the path of the approaching machine. The lead machine operator will
 spot the following machine using hand signals. Each successive operator in the consist will be
 responsible for spotting the following machine in the same manner.
- When employee's tasks required them to occupy the center of the track during work mode operations, they must not position themselves less than 15 feet from the nearest on track machine. Certain machines, including adzers, mowers, brush cutters, and other may require an increased distance.
- Before making a reverse movement, the machine operator must ensure that the backup alarm, when equipped, is activated and/or the appropriate whistle signal is sounded. Additionally, the operator must ensure the track is clear of men and equipment before the reverse movement is made.

S20.8.2 Maintain Lookout: (ADDITION)

Add the following additional instructions:

When traversing turnouts or crossovers, employees must not ride cars more than 60 feet in length on the side next to equipment on an adjacent track.

S20.10.3 Brake Sticks (Addition)

- Brake stick holders on locomotives will be used during the shift. {Change Last Bullet Point to Read}
- Brake stick holders have been installed outside of the East & West Yard Offices, they are color coordinated and have a location for each brake stick. The holders are colored Red, Yellow, Green, or black, the Brake Sticks for these holders have been colored to match their respective holder. Upon completion of the shift, assignments must place the Brake Stick back in the color corresponding holder. Red, Yellow, Green are for use in yard assignments and Black is for Industry assignments. Failure to not place the Brake Stick back in its proper holder's location may result in discipline. {*Add Bullet Point to Rule*}

S21.4 Defective Switches

Add the following bullet point:

• Tag the defective switch with a warning tag describing the defect, Location, Tags can be found on all BRC locomotives in designated holder (example of tag below.)

	OUT OF SE	RVICE
	DATE	Nice Constant
m	SER. #	
	PROBLEM	R. S. STORE
	SIGNED BY	
		ULINE 5-17851 1-800-295-8510, ultre.com

BRC Operating Practices Rulebook, (OP-1, Effective January 1, 2017)

Make the following modifications to the rules below:

OP Rule 1.2 Locomotive Inspection Procedure (SUPERSEDE)

Replace OP-1 Rule 1.2, Locomotive Inspection Procedure, Section B with the following:

B. Locomotive Not Inspected on Previous Calendar Day:

If the locomotive inspection card, form #2322, indicates that the locomotive was not inspected on the previous calendar day, ascertain from the Yardmaster when the locomotive was last used.

On date(s) locomotive was not used fill in the date(s) with "Not Used" and inspect the locomotive before placing it into service.

OP Rule 1.2.1 Conducting a Locomotive Inspection (ADDITION)

Replace OP-1, Rule Op 1.2.1, Conducting a Locomotive Inspection, Section D, Page 10 System General Order 2024 - 005 with the following:

D. Documentation of Inspection:

Reporting Requirements:

LOCOMOTIVE DAILY INSPECTION REPORT (BRC Form 2322):

Locomotive Inspections will be documented using locomotive inspection reports, which will be retained on the locomotive for each calendar month.

A new form must be used for each month. These forms will be placed in the locomotive, in the same holder as the 92-day inspection report forms (Blue Card) in the locomotive cab.

Transportation employees performing locomotive inspections will, after inspecting the locomotive, complete the **LOCOMOTIVE DAILY INSPECTION REPORT** form located on the locomotive. This requires the employee to document all information listed for the calendar day that the inspection was performed. A separate form must be completed for each locomotive in a consist including hump mother and slug consists.

A signature and employee ID number must be provided to comply with the provisions of 49 C.F.R. § 229.21.

If a defect is found, indicate **Y** in the **DEFECT** column and then complete an **RCO / LOCOMOTIVE ENGINEER'S DEFECT REPORT**.

LOCOMOTIVE DAILY INSPECTION REPORTS are not to be removed from the locomotive, except by Mechanical Department representatives.

RCO / LOCOMOTIVE ENGINEER'S DEFECT REPORT (BRC Form 2323):

If a defect is found during a locomotive daily inspection, after completion of the **LOCOMOTIVE DAILY INSPECTION REPORT**, the employee conducting the inspection is responsible for notifying the Diesel Shop Foreman by radio and notifying the Yardmaster or Train Dispatcher of the condition.

The employee MUST then complete an **RCO / LOCOMOTIVE ENGINEER'S DEFECT REPORT**, BRC Form 2323 and scan the form to the diesel shop before tie-up.

Scan Process at any On Duty Location:

- 1. Select SCAN/FAX
- 2. From the Address Book (Favorites), select LOCOMOTIVE DAILY INSPECTION
- 3. Select START Scanning Verification:

Once scanning is complete, it will be displayed on the computer terminal.

On the computer terminal screen, a folder marked **LOCOMOTIVE DAILY INSPECTION** is displayed.

- Select this folder to identify that a scan was received with a matching timestamp.
- Open this form and verify that your scan is correct and legible.

- If the scan is not visible, or complete in the folder, contact the Locomotive Shop Foreman, (708) 496-4067 for disposition of the form.
- If the scan is unreadable, scan the form again.
- If the scan process is successful, and a legible form is displayed on the computer terminal, it is not necessary to retain a printed copy.

Assistance with Scanning:

• Call (630) 286 - 8180 for BRC IT Support in the event of issues with the scanning process.

OP Rule 1.18.2 Locomotive Winter Idle (NEW)

When ambient temperatures are forecast to be below 20F, or when directed by proper authority, locomotives in yard service will be left in high idle to avoid instances of freezing.

To prepare a locomotive to be left in winter operations, do the following:

On locomotives equipped with a **WINTER/SUMMER** Selection Switch in the electrical panel:

• Ensure locomotive is left with **WINTER** selected.

On locomotives not equipped with a WINTER/SUMMER selection switch:

- Leave the locomotive isolation switch in **RUN**.
- Generator Field Switch to OFF
- Reverser centered
- Leave throttle in RUN 3 (3rd Throttle Notch)

In all cases, ensure the locomotive consist is properly secured in accordance with GCOR 7.6 Securement, and GCOR 7.6.1 Unattended Locomotives, as applicable.

<u>Note</u>:

When instructed to leave locomotives in Winter Idle, **Rule OP 4.15.2, Unattended Equipment**, is modified, removing the requirement to isolate the locomotive.

OP Rule 2.5.1 Class II Air Brake Test – Application (SUPERSEDE)

Change reference in second bullet from four hours to twenty-four hours.

OP Rule 2.6.1 Class III Air Brake Test (Application) (SUPERSEDE)

Change references in third and fourth bullets from four to twenty-four hours.

OP Rule 2.8 Train Line Kept Charged (SUPERSEDE)

Change references in third and fourth bullets from four to twenty-four hours.

OP 4.6 Set Up and Testing: (Addition)

Before operating the locomotive in the Remote Control Mode, setup the equipment and perform required tests to be certain that the safety feature operation will respond properly to the OCU commands.

EACH RCO MUST OBSERVE THE TESTING OF BOTH OCU'S.

A. Setting Up a locomotive for remote operation requires the following five steps: 1. Ensure Hand Brake is applied

- 2. Setup the control stand for remote operation
- 3. Setup the electrical control panel and cabinet
- 4. Setup the train line air (if necessary)
- 5. Setup the remote equipment

OP 4.8.1 RCO Radio Frequencies (SUPERSEDE)

Replace the Radio Frequency Chart with the following:

LUCATION	FREQUENCY
East Yard Assignments	F2
Hump Assignments	F1
West Yard Assignments	F3
Industry Assignments	F3

OP 4.12 "A" Operator Assignment

During Remote Control Operations, the Conductor, must link up as the "A" operator.

OP 4.14.1 RCO Belt Pack Train Brake Speed Restrictions (NEW):

A. Functionality of the OCU Train Brake Speed Restrictions is outlined below:

Requested Speed	Brake Pipe Fully Charged	Minimum Application 7 lb.	Light Application 10 lb.	Medium Application 15lb.	Unlimited Applications Allowed	Notes:
1-4 MPH	Not Required	YES	YES	YES	YES	INITIAL REDUCTION ONLY
7-15 MPH	Required	YES	NOT ALLOWED	NOT ALLOWED	NOT ALLOWED	

B. Cycle Braking Minimum Train Brake Application (BRAKE PIPE FULLY CHARGED)

Requested Speed	Application	Notes
7 – 15 MPH	MINIMUM + RELEASE + MINIMUM	12 LB REDUCTION NO SPEED RESTRICTIONS

C. Cycle Braking Minimum Train Brake Application (BRAKE PIPE NOT FULLY CHARGED)

Requested Speed	Application	Speed Selector	Application	Notes
1 - 4 MPH	MINIMUM + RELEASE	FASTER THAN 4 MPH	MINIMUM	12LB REDUCTION

D. Brake Pipe Recharge Times

MINIMUM (7lb)	LIGHT (10)	MEDIUM (15lb)	FULL (32lb)	Minimum (Cycle Brake 12lb)
2 MINUTES	4 MINUTES	6 MINUTES	2 MINUTES	4 Minutes
			After	Same as "Light"
			"Brake Recovery Complete"	

OP 4.15.3 RCO Crew Going off Duty: (Supersedes)

When going off duty, and the locomotive(s) will be left unattended, the RCO must secure the RCL by turning off all OCUs linked to the locomotive consist, apply hand brake on the locomotive(s) and place the locomotive(s) Isolation Switch in the *Start/Stop/Isolate* position. In addition, complete all steps to return the locomotive to the Lead Manual Mode setup and comply with current locomotive securement rules.

• Apply GCOR 7.6. GCOR 7.6.1, and OP1 4.6.3

OP 4.16.1 Assignment of OCU (SUPERSEDE):

Change second paragraph to read:

The OCU's will be issued and returned in the Yard Office in clear view of the security camera.

OP 4.16.2 OCU Batteries (ADDITION): Add the word "charger" to the end of the last sentence.

OP **4.17.1 Pitch Control (Hump Assignments)**:

OP 4.17.1 Pitch Control (Hump Assignments): Pitching control instructions for the Hump

 While working on the hump, crew members must inform each other which direction the locomotive is facing when pitching control to each other

OP 4.17.2 Handling Movements with Air (West Hump)

This rule only applies to Hump Assignments using a two locomotive consist in the West Receiving Yard, Hump Assignments with a three locomotive consist in the West Receiving Yard is not required to have air applied to cars.

- A. SHOVING A MOVEMENT THAT IS STOPPED ON A WEST HUMP APPROACH TRACK TO THE TOP OF THE HUMP:
 - <u>PRIOR</u> to initiating movement on a stopped train (when train line air is cut in), the Automatic Train Brake switch must be positioned to a **MEDIUM** train brake setting.
 - While the **MEDIUM** train brake setting is applied, initiate train movement by placing the OCU speed selector in **HUMP FAST**.
 - Once the OCU movement command is initiated, wait a minimum of 5 seconds

before releasing the **MEDIUM** train brake setting.

- Communication (Via radio on channel 089-089) between the Primary Operator and the other crew member must take place indicating when the Medium Train Brake has been released, the other crew member must acknowledge the primary Operator when the Medium Train Brake is released.
- Upon initiating movement, a crew member will apply sand until the requested speed is obtained. When available, a crew member on the locomotive may be utilized to apply sand.
- The Primary Operator will apply sand using the OCU.
- Select the desired hump speed on the OCU when the movement is approaching the top of the hump to avoid stopping when humping is to immediately begin.

To Apply Sand:

Depress and hold either of the **RSC** buttons until the OCU Led screen reads **Operator Sand** and continue to hold to apply sand on the rail.

B. WHEN STOPPING MOVEMENTS ON THE GRADE OR AT THE TOP OF THE WEST HUMP

When necessary to stop the movement on the grade, or at the top of the West Hump, do the following:

- Use **MEDIUM** train brake setting prior to selecting **STOP** on the OCU.
- Apply sand prior to stopping on a grade.

C. WHEN RESTARTING A MOVEMENT ON THE GRADE, OR AT THE TOP OF THE WEST HUMP

When restarting a movement on the grade, or at the top of West Hump, do the following:

- The RCO must ensure all buff and/or draft forces have settled before any attempt to start movement is made.
- While the **MEDIUM** train brake setting is still applied, initiate movement by selecting the desired hump speed.
- Once the OCU movement command is initiated wait, 5 seconds prior to RELEASING the **MEDIUM** train brake setting.
- Communication (Via radio on channel 089-089) between the Primary Operator and the other crew member must take place indicating when the Medium Train Brake has been released, the other crew member must acknowledge the primary Operator when the Medium Train Brake is applied.
- The primary Operator will apply sand using the OCU until the requested speed is obtained.

To Apply Sand:

Depress and hold either of the **RSC** buttons until the OCU Led screen reads **Operator Sand** and continue to hold to apply sand on the rail.

OP 4.17.4 Remote Control Speeds (Supersedes)

The use of the **Coast** feature in remote operations is not permitted.

Replace the chart in the OP-1 (page 47) with the table below. (HUMP OCU "Max" Speed is now set at 15 MPH)

Yard OCU	Miles Per	Hump OCU	Miles Per
speed selector	Hour	Speed	Hour
		Selector	
Stop	0 MPH	Stop	0 MPH
Coast	NOT PERMITTED	Coast	NOT PERMITTED
Coast B	15 lbs Brake Cylinder	Couple	1.7 MPH
Couple	1 MPH	Hump	1.7 MPH
4	4 MPH	Hump Fast	2.2 MPH
7	7 MPH	4	4 MPH
10	10 MPH	8	8 MPH
Max	15 MPH	Max	15 MPH

OP 4.17.5 Variable Speed Humping:

Remove the entire Rule.

OP 4.17.6 Remote Handbrakes (New)

The BRC is installing Beltpack Electronic Handbrake Interface (BEHI) to its locomotives that are currently equipped with an electric handbrake. This feature will allow the controlling Remote-Control Operator to apply or release the handbrake through the Operators Control Unit (OCU.) Locomotives equipped with an electric handbrake capable of being applied through an OCU control with have a label on the electrical cabinet stating, *"LOCOMOTIVE EQUIPPED WITH REMOTE HANDBRAKE."*

To **apply the handbrake** on a locomotive that is equipped with BEHI the following steps need to be performed using the OCU.

- 1. Set the Speed lever in the STOP position and the Independent Brake Override lever in the Release position.
- 2. Press either Reset/Sand switch and within 5 seconds move the Independent Brake Override lever to the FULL position.

An unsolicited Talker message will be broadcast to report the result of the Handbrake Apply command. If successful, that Talker message will be "Parking Brake Applied". If not successful, the unsolicited Talker message will be "Parking Brake Fault".

Only the Controlling OCU can remotely apply the Electronic Handbrake System and this feature is only available when the BELTPACK[®] System is in Remote Mode.

To **release the handbrake** on a locomotive that is equipped with BEHI the following steps need to be performed using the OCU.

- 1. Set the Speed lever in the STOP position and the Independent Brake Override lever in the FULL position.
- 2. Press either Reset/Sand switch and within 5 seconds move the Independent Brake Override lever to the Release position.

An unsolicited Talker message will be broadcast to report the result of the Handbrake Release command. If successful, that Talker message will be "Parking Brake Released". If not successful, the unsolicited Talker message will be "Parking Brake Fault".

Note that this is the only time the BELTPACK[®] System will command the Electronic Handbrake to release. Losing communication with an OCU, pitching control to the second OCU or restarting the BELTPACK[®] System will NOT cause it to automatically release the handbrake.

Only the Controlling OCU can remotely release the Electronic Handbrake System and this feature is only available when the BELTPACK[®] System is in Remote Mode. Control can be pitched from one OCU to the other while the Handbrake is applied. So one OCU can apply the handbrake, and then control can be pitched to the second OCU allowing it to release the handbrake if desired.

Consist Handbrake Operation

At present, the BELTPACK® system will only have control of and get feedback from the Electronic Handbrake Device on the controlling RCL.

Status Feedback to the RCL

Operator Four new Talker messages were created to provide the RCL Operator with a status of the Electronic Handbrake System. The new messages are:

- "Parking Brake Released"
- "Parking Brake Applied"
- "Parking Brake Fault"
- "Parking Brake Command in Progress"

The **"Parking Brake Applied"** message will be used to notify the RCL Operators that the Electronic Handbrake has transitioned to the applied state. This message will also be appended to every Talker status message

whenever the Electronic Handbrake is in the applied state.

The **"Parking Brake Released"** message will only be used to notify the RCL Operators that the Electronic Handbrake has transitioned to the Released State (from either the Applied State or the Fault State). This Talker message will not be repeated while the Electronic Handbrake System remains in the Released State.

The **"Parking Brake Fault"** message will be used to notify the RCL Operators when a fault gets detected in the interface between the BELTPACK[®] System and the Electronic Handbrake System and also every time a command to apply or release the Electronic Handbrake fails.

The **"Parking Brake Command in Progress"** message will be appended to every Talker status messages to notify the RCL Operators whenever a command to apply or release the Electronic Handbrake is in progress. This status phrase can be useful to the RCL Operators since the application or release of the Electronic Handbrake is fairly slow and can take up to one minute.

Conventional (non-Remote) Operation of the Locomotive Handbrake

The BELTPACK[®] System does not interfere with the conventional (i.e. non-remote) operation of the locomotive handbrake, therefore the RCL handbrake can be applied or released from either the OCU (Remote Handbrake), or electrically via the Electronic Handbrake control box buttons, or manually (with the Electronic Handbrake System set to Manual mode).

The RCL Operator needs to consider the following issues:

- i) If the locomotive Handbrake is operated electrically, either using the OCU or the APPLY and RELEASE pushbuttons, then the Electronic Handbrake device will notify the BELTPACK[®] System of this status change, via the APPLIED and RELEASED lights status signals, and the BELTPACK[®] system shall forward this information to the RCO via appropriate unsolicited Talker messages.
- ii) Note that electrically applying or releasing the Electronic Handbrake using the APPLY or RELEASE pushbuttons will cause the BELTPACK[®] System to declare a Service penalty stop.
- iii) However, if the Handbrake is manually operated (with the Electronic Handbrake System set to Manual mode), then the Electronic Handbrake device will not send any status signal to the BELTPACK® System. The BELTPACK® System responds to this condition by declaring a Service Brake penalty. The Talker status message associated with this fault is "Parking Brake Fault". This fault condition will not keep the BELTPACK® System from being operated normally and the Talker message associated with this fault condition will be cleared once a valid lift command has been accepted by the BELTPACK® System. While the Electronic Handbrake System remains in Manual Mode, the "Parking Brake Fault" Talker message will only be repeated if the RCL Operator attempts to remotely apply or release the handbrake from the controlling OCU and following a transition of the BELTPACK® System into Remote Mode.
- iv) It's important to note that, setting the Electronic Handbrake System to Manual mode,
 System General Order 2024 005

disables the capability of remotely (i.e. via the OCU) controlling the handbrake.

Safety Features and Interlocks

Commanding movement with handbrake set.

The RCL Operator will have the ability to command new lifts while the Electronic Handbrake is in the applied state. The purpose of these lifts is to verify the effectiveness of the handbrake application. These lifts, though permitted, are limited in duration and power (throttle notch) and are BCF configurable to be compatible with the Railroad's Hand Brake Test procedure.

If a lift is made while the Electronic Handbrake is in the Applied state, the BELTPACK[®] speed controller, while attempting to reach the target speed, will not exceed the maximum power setting specified in the BCF file. Note that if the locomotive starts moving while the lift command is in progress, it's possible that the prescribed maximum power be reduced and eventually entirely removed (GF deactivated) if the locomotive speed approaches the commanded speed. It's also possible that some Independent brake gets applied if the locomotive speed exceeds the commanded speed.

These special lifts are also limited in their duration. If, after the time duration specified in the BCF file has elapsed, the Operator has not returned the OCU speed lever to the STOP position, the BELTPACK[®] system will terminate the movement by generating a Service fault stop associated with the unsolicited Talker message "Parking Brake Applied".

Detected movement with handbrake set

While the handbrake is in the Applied State, if locomotive movement is detected for three (3) consecutive seconds, the system shall apply a Full Service Train Brake penalty, as this is a sign that the handbrake retarding force has been overcome and the consist is moving when assumed to be stationary. Note that this fault will not be generated if movement is being commanded by the RCL Operator as described in the preceding section.

Commanding movement while a Handbrake Apply Command is in Progress

The RCL Operator is not allowed to initiate locomotive movement while a command to apply the Electronic Handbrake (from the OCU) is in progress. The Talker status messages shall identify this state with the Talker phrase "Parking Brake Command in Progress". Commands to initiate movement will be accepted after the Electronic Handbrake is applied or after the Electronic Handbrake Apply command times out (approximately one minute). Note that this restriction does not apply to Handbrake Release commands. i.e. The RCL Operator can initiate locomotive movement while a Handbrake Release Command is in progress.

OP 4.18.0 Special Operating Procedures (RCL) – BRC Yards: (Addition)

OP 4.18.1 Red OCU's and Batteries (NEW)

New OCU's for have been implemented. These OCU's and batteries can be identified by their red color. The new OCU's are lighter in weight, contain larger displays, and include additional functions.

Additionally, the new OCU's and batteries incorporate GPS tracking technology.

The use of yellow RCO boxes on the hump in the East Yard is no longer acceptable, unless authorized by proper authority.

Use of Red OCU's:

- Assignments will use batteries marked for the specific shift and assignment only. Assignments are denoted on the battery charger cradles. Battery use on the hump for extra hump assignments, or if batteries are not ready for use, will be coordinated through the Operations Manager.
- OCU batteries must returned to the assigned cradle charger for the specific shift and assignment at the end of duty.
- In the event of a crew change at other than the starting location, the assigned OCU and battery are to be returned by the original assigned crew, prior to tie-up.
- All defective batteries will be reported to the Operations Manager immediately, this may be relayed through the Yardmaster.
- Defective batteries must be placed in bins provided at the on-duty locations.
- Any defects noted on an OCU will be brought to the attention of the Operations Manager immediately, this may be relayed through the Yardmaster.
- Yardmasters are responsible for noting any issues or damage reported by crew members into the Operational Issues Applications in Belt Apps.
- Information reported must include the OCU and battery number(s), nature of defect, and location where the defect occurred.
- In addition, the disposition of the asset must be noted.
- When a crew is required to get power from the diesel shop, they will take boxes and batteries from the starting location.
- When assignments are assigned to take power to the shop, they must return OCU's and batteries to the on-duty location, unless instructed by proper authority.
- Batteries returned to the on-duty location must be placed on the charger for recharging in the designated slots.
- When removing or replacing the battery, turn the OCU off. The battery is in the recessed area on the underside of the OCU. The battery is held in position by tabs at one end and secured using a spring-loaded catch.
- Ensure the battery is fully secured and locked in the OCU battery compartment. System General Order 2024 - 005

<u>NOTE</u>: Batteries and OCU's are considered safety devices, and misappropriation of these resources, or failure to properly return batteries in accordance with these instructions, is not acceptable. This may be considered as theft of company material.

Programming of Red OCU's:

New Red OCU Programming Procedure:

- 1. OCU must be turned **OFF**.
- 2. Select (Operating Frequency) F1, F2, or F3.
- 3. Select PROG A or PROG B (Starts program to assign as either an A or a B unit)
- 4. The OCU Infrared Transceiver is activated when:
 - A. Depressing the OCU **ON/OFF** button and <u>IMMEDIATELY</u> depressing either the left or right **Reset/Sand RSC** (a.k.a. Vigilance) button.
 - B. The Alpha–Numeric Display indicates "IR Link Release Vigilance".
 - C. The RCO now has five (5) seconds to respond to this instruction to Release the **RSC** (Vigilance) button.
 - D. When the RCO responds by releasing the **Reset/Sand** (Vigilance) button within 5 seconds, the OCU now activates the Infrared Transceiver for at least a 20 second period and displays the message "IR LINK".
- 5. Align OCU with the OPP Infrared eye (transceiver of the OPP Station).
 - A. Alignment, and successful data transfer, are confirmed by an audible beep from the OCU, plus the Alpha-Numeric display indicates "OCU LINK COMPLETE."
 - B. Check that the intended OCU COM LED is now ON.

<u>Note</u>: Step 4 (A):

Depressing the **OCU ON/OFF** button and IMMEDIATELY depressing either the left or right **Reset/Sand RSC** (a.k.a. Vigilance) button will cause the OCU to become **UNLINKED/UNPROGRAMMED** from a locomotive at any time.

This process should not be done for any other purposes, except for programming OCU's while on the locomotive, or when instructed by proper authority.

OP 4.18.2 Yard / Industry / Work Train Assignments, OCU Chargers and Batteries (NEW)

Yard Assignments, Industry Assignments, and Work Trains are now equipped with OCU Batteries labeled for a specific shift and job assignment.

These batteries are to be used by the specific shift and assignment only unless instructed by proper authority.

- All OCU batteries must be returned to the assigned cradle charger for the specific shift and assignment at the end of duty to allow for re-charging.
- In the event of a crew change, at other than the location where assignment reported for duty, the OCU batteries must be returned to the original location and placed in the assigned charger by the original assigned crew.
- All defective OCU batteries and Cradle Chargers will be reported to the Operations Manager immediately, this may be relayed through the Yardmaster.
- Defective batteries must be placed in bins provided at the on-duty locations.
- OCU Battery use for Extra Assignments, or if OCU Batteries are not ready for use, will be coordinated through the Operations Manager.
- Yardmasters are responsible for noting any issues or damage reported by crew members into the Operational Issues Applications in Belt Apps.
 Information reported must include the OCU and battery number(s), nature of defect, and location where the defect occurred. In addition, the disposition of the asset must be noted.

NOTE:

Batteries and OCU's are considered safety devices, and misappropriation of these resources, or failure to properly return batteries in accordance with these instructions, is not acceptable. This may be considered as theft of company material.

OP 4.18.3 Two-Way OCU:

New <u>Two-way OCU's</u> in Hump Operation (New)

The BRC has implemented the use of Two-Way OCU in Hump Operation, the new Two Way OCU boxes are labeled under the digital display **"2 Way Controller"** with this new two-Way OCU locomotive Software is required to be updated so it can transmit signals to the controlling OCU. Currently only the BRC 312 is equipped with this software, when using the BRC 312 you must link a new Two-Way OCU. The Two-Way OCU itself can be used on any BRC locomotive however only will receive information when used on the BRC 312. Linking the new Two-Way OCU to a locomotive will remain the same procedure as the current OCU's.

When using the BRC 312 the Two-Way OCU has digital feedback in the form of LED's messages. The LED feedback is sent to the OCU(s) that are assigned to the RCL system. The feedback LEDs show the state of the Two-Way OCU system with respect to Independent Brake Selection Status, Emergency Status, Speed Selection Status, Reverser Selection Status and Train Brake Selection Status all on the digital display, you can scroll through these features by using the up/ down arrows buttons below the digital display located on the top of the OCU

Other features of the new OCU are a variety of settings that both the Controlling OCU (Primary) and the Non-Controlling OCU are equipped to display. The controlling OCU position will be displayed with a Green Light of the selected settings on both OCU boxes, on the Non-Controlling OCU there will be an amber light displayed to show the current setting of that OCU.

The additional features will include:

- OCU Alerter will sound to indicate unintentional stops caused by Communication Losses and other fault stops. This is a safety improvement to alert the OCU that the consist is coming to an un-commanded stop.
- Pitch & Catch operations are simplified because the controlling OCU indication is available in the visual feedback.
- The indication of a movement command being accepted by the system will be visually available to the OCU(s) assigned, since speed and direction feedback is shown.
- The operators have a visual indication when Two-Way OCU system is in penalty.

The new Two-Way OCU will be kept at a location where the BRC 312 is assigned, in the event a new Two-Way OCU will not operate as intended and needs to be changed out, the BRC Diesel shop needs to be notified immediately and they will assign a new Two-Way OCU and the original OCU must be given to the Diesel Shop for repairs.

Symbols Used in Linear Profile (Page 81 Timetable #7)

0[H]0	Automatic Signal (With Number Plate)	Change to	에비아	Intermediate Signal (Signal with Number Plate)
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System General Orders in Effect:

YEAR OF ISSUE	NUMBERS
2024	2024 - 005

Appendix A – Map Additions:



Add the following map to Timetable 7, Add below Linear Profile between pages 82 & 83:



Add the following map to Timetable 7, Replacing Page 83:



Add the following map to Timetable 7, Replacing Page 84:



Add the following map to Timetable 7, Replacing Page 85:



Add the following map to Timetable 7, Replacing Page 86:



the following map to Timetable #7, replacing page 89:

Add the following map to Timetable #7, replacing page 90:

Add the following map to Timetable #7, Replacing Page 95:

Add the following map to Timetable #7, Replacing page 96:

Add the following map to Timetable #7, replacing Page 97:

Add the following map to Timetable 7, replacing Page 98:

Add the following map to Timetable #7, replacing Page 92:

Page 52

Add the following map to Timetable #7, replacing Page 93: