SOUTHERN PACIFIC TRANSPORTATION COMPANY



SACRAMENTO DIVISION SPECIAL INSTRUCTIONS No. 14

AT 12:01 A.M.,
PACIFIC STANDARD TIME

OF THE TIMETABLE CURRENTLY IN EFFECT

- R. L. KING, General Manager.
- W. J. LACY, Assistant General Manager.
- J. J. WILLIS, General Superintendent of Transporation.
- O. D. GOODWILL, Asst. Gen. Superintendent of Transportation.
- R. R. ROBINSON, Superintendent.

Employees must know they have in their possession copy of Rules and Regulations of the Transportation Department, effective January 1, 1969.

DEFINITIONS

HOLIDAYS: New Year's Day, January 1.
Washington's Birthday, third Monday in February. Decoration Day, last Monday in May. Independence Day, July 4. Labor Day, first Monday in September. Thanksgiving Day, fourth Thursday in November. Christmas Day, December 25.

RULE 2.

ADD: Brakemen, firemen and switchmen with less than ninety days service are not required to carry, while on duty, a reliable railroad grade watch and watch certificate.

RULE 7-B. Switchmen must use green flag by day and green light by night or oral instructions in giving proceed signals for movement of trains at Sacramento, Roseville, and Sparks, except that at Roseville proceed signal for movement to or from East Valley Subdivision yellow flag by day and yellow light by night must be used.

RULES 10-G, 10-H and 10-I. When unattended red flags or red lights, yellow signals, red CONDITIONAL STOP signs and yellow PROCEED PREPARED TO STOP signs are displayed between siding switches, they must be duplicated to the right of track in direction of approach. If clearance between siding and main track does not permit display of these signals to the right of track in direction of approach, signals may be displayed to the left of track in direction of approach. Display of these signals to the left of track in direction of approach must be respected as though they were displayed in accordance with these rules.

In multiple main track territory:

Foreman's oral authorization for train to pass "Red Conditional Stop" sign in multiple main track territory on which trains may be authorized to operate in either direction must designate main track on which authority applies, worded in the following form:

Foreman's Response

_ IN CHARGE OF THE WORK "THIS IS SP FOREMAN _ AND MP_ BETWEEN MP SP TRAIN ORDER . WE ARE IN THE CLEAR OF TRACK AND YOU MAY PROCEED PAST THE RED CONDITIONAL AND THROUGH THE LIMITS STOP SIGN ON TRACK ____ OF ORDER AT MPH REPEAT

Engineer's response and foreman's acknowledgment must indicate main track on which movement is authorized.

RULES 10-H and 15. On all branch lines, except: Between Hamilton and Wyo on Colusa Branch, and between Brighton and Folsom Junction on the Placerville Branch, and, for westward trains on Stirling City Branch, and on Mina Branch MP 288.62 to MP 328.00, yellow signals will be displayed one-half mile from point of restriction, and when a torpedo is exploded in the vicinity of a yellow signal displayed in accordance with Rule 10-H, train must proceed expecting to find an unattended red signal that may be displayed one-half mile beyond the torpedo and the yellow signal.

RULE 10-J. Speed signs prescribing an increase in speed will not be installed on branches. Speed Restrictions tables will indicate permissible speeds between mile post locations named.

First sentence in second paragraph and second sentence in fourth paragraph of Rule 10-J are modified to read as follows:

"Speed signs that prescribe reduction in speed will be located two miles from initial point of restriction, and where used to au-thorize increase in speed will be located at point where higher speed commences.

'Such signs in advance of signal indicate the speed that must not be exceeded while engine is passing signal two miles beyond the speed sign, unless signal can plainly be seen to be displaying green aspect.'

RULE 14. Where there are multiple public crossings not more than one-fourth mile apart, sign bearing letter "X" located one-fourth mile in advance of first crossing will display a figure which

represents the number of crossings involved.

Whistle signal under provisions of Rule 14(1) must be sounded until engine has passed over last crossing.

RULE 15. Each torpedo placed will be duplicated on opposite rail during snow storms, or when snow on rails.

When helper engine is coupled ahead of road engine over part of a subdivision, train will be identified by engine number displayed on road engine.

First paragraph of Rule 21 revised as follows:

"Trains must be identified by engine number on lead unit when practicable. Only the number designated for identification will be continuously illuminated when engine is so equipped.'

Trains handling loads of excess dimensions covered by train order must be identified in CTC, Interlocking and on double track.

RULE S-72. Westward trains are superior to trains of the same class in the opposite direction.

RULE 101. If any member of crew has reason to believe train has passed over defect in track or roadbed, train dispatcher and opposing or following trains must be immediately notified of condition encountered from first available means of communication. If means of communication is not immediately available, or if train dispatcher cannot afford appropriate protection, train involved must afford protection.

Should a passenger train break in two or an emergency application of brakes occur while in motion on grade, head brakeman will immediately go towards rear, close angle cock at opening if train has parted, set hand brakes, and turn up retaining valves on detached portion. After train is coupled air must be applied from engine before hand brakes and retaining valves are released.

"At any time a moving train with a helper engine has emergency application of air brakes for any cause, before proceeding an inspection of train must be made on both sides to determine all wheels are on rail and no damage or defects in track exist which will interfere with safe movement of train.'

RULE 103-A. In the State of California trains moving under conditions that may require them to stop must, where possible, stop to clear public grade crossings. When not possible to stop clear of such crossings, and train cannot proceed immediately, crews on other than passenger trains must cut these crossings within ten minutes unless no vehicles are waiting at or closely approaching the crossing. Public crossings must be left open until it is known that trains are ready to depart. Crews required to pick up, set out or perform switching operations must, when track room exists, stop their trains back a sufficient distance to avoid blocking public crossings when coupling trains and while charging train lines. When recoupling at public crossings, trains shall be moved promptly consistent with safety.

Switching movements over public grade crossings should be avoided whenever possible. If not possible, such crossings must be cleared frequently to allow vehicles to pass and must not be occupied continuously for longer than ten minutes unless it can be seen that

Outside are waiting at or closely approaching the crossing.

Cars or locomotives must not be left standing nor switches left open within the controlling circuits of automatic gate protection devices unless timeout features are provided to allow the gate arms

RULE 105. Sidings designated "E" in Capacity of Sidings column are assigned for use by eastward trains; those designated "W" are assigned for use by westward trains. Those designated "M" for middle, may be used by trains in either direction.

Capacity of eiglings column indicate length of training foot that

Capacity of sidings column indicates length of train in feet that

can be accommodated between fouling points.

RULE 211 and Form "N" Train Order: ADD:

When operators advance a train at a station under Rule 211, Example (3), the following wording must be used:

"This is S.P. operator (station). I have a Form 'N' train order to advance (train) on main track until (time).

RULE 290-A. Revised to read as follows: Indication: PROCEED WITHOUT STOPPING NOT EXCEEDING RESTRICTED SPEED PREPARED TO STOP SHORT OF NEXT HOME SIGNAL.

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

PUSH BUTTONS

Where signal protection is provided for movements from an adjacent track to main track, push buttons and pilot lights are in-stalled in box near each of the two signals, with time-release feature, to clear signals on one track when the control circuit on the other track is occupied.

Train on main track to let train on siding pass may clear signal on siding by pressing button bearing number of signal on siding. Train on siding to let train on main track pass should not pass Approach Circuit sign, but when necessary to do so, may clear signal on main track by pressing button bearing number of signal on main track.

ELECTRIC OR MECHANICAL SWITCH LOCKS

Where electric or mechanical switch locks installed, be governed by instructions posted in telephone booths, on doors or on housings of electric or mechanical switch lock.

On single track within yard limits, when an automatic block signal displays stop indication, engines, after stopping, may proceed at restricted speed under the following conditions:

When a preceding train is seen in the block, and intervening track is seen to be clear.

(2) When view of track is clear to end of block.

After waiting five minutes and no train or engine is seen or heard approaching.

INTERLOCKING

RULE 663(b). Interlocking Elvas, Antelope, Norden, Win-

Operator (or dispatcher where applicable) may authorize movements under provisions of this rule after it has been ascertained indication lights on control panel are illuminated indicating dual control switches are in proper position and locked for movement without requiring dual control switches to be placed in hand position as required by Rule 772.

When indication lights on control panel are not illuminated movements may be authorized under provisions of this rule; however, before making a facing point or trailing point movement over dual control switches, such switches must be placed in hand position in accordance with Rule 772 and locked until movement over switch has been completed. When movement has been completed, switch must be returned to normal position and selector lever restored to motor position and locked.

RULE 705. HOT BOX DETECTORS

Instructions follow for operation of hot box detector boxes or indicator array consisting of white lights and revolving red beacon when stopped by illuminated letter, flashing white light, actuated by hot box detector device. These instructions are also posted inside detector boxes

Hot box detector scanner sites have a white light continuously displayed on track side of instrument house, except when a hot bearing is detected, at which time light will start flashing. Crew members must keep a vigilant lookout for light and, when flashing, conductor and engineer must immediately orally compare observation when means of communication is available. Absence of white light must

be promptly reported to Train Dispatcher:
When letter "H" is illuminated or it is known a hot bearing has been detected by crew member observing the flashing white light at scanner site, speed of train must be reduced to not exceeding 15 MPH until stop is made at location of readout indicator.

When letter "W" is illuminated train must stop and wait until indicator is extinguished or permission is obtained from train dispatcher to proceed. Telephone located near "W" indicator; if no communications (phone out) wait 10 minutes and proceed at not to exceed restricted speed to signal where letter "H" is located.

Numerals displayed by indicator inside of box indicate location of car with hot bearing in train. Top row indicates hot bearing on right side of train and lower row on left side of train in direction of movement. Numbers displayed on top row or bottom row indicate number of axles between hot bearing and rear of train. Indicator will display a maximum of four hot bearings on each side of train. All journals of car indicated by detector as well as each adjoining car must be inspected.

When hot box detector is activated, member of crew must make a physical count of axles from rear of train to axle indicated by digital readout and when hot bearing is not located then all journals of car indicated by detector as well as five cars on either side of the car involved must be inspected.

When H indicator indicates a hot journal on train and there is no count shown on hot bearing detector and red light below readout marked "Locator out of Service" is illuminated, all journals on train must be inspected. When "H" indicator indicates a hot journal on train and it is obvious numerals displayed by indicator inside box are in error, all journals on train must be inspected.

After inspection has been completed train dispatcher must be notified of condition found. When it is safe to proceed, member of crew must push button below indicator panel to cancel numbers on the indicator. Case door must be closed and secured with switch lock.

DETECTOR INDICATOR ARRAY

**Detector instrument house is equipped with indicator array consisting of white lights and revolving red beacon.

*White light at top center of indicator array will be continuously displayed except when a hot bearing has been detected, at which time light will start flashing. Absence of white light must be promptly reported to train dispatcher.

Revolving red beacon at top center of indicator array will be normally dark except when a hot bearing has been detected beacon

will be actuated.

Three vertical white lights are located on each side of indicator array. Lights on right side will be displayed for hot bearings on right side of train, and lights on left side will indicate hot bearings on left side of train, in direction of movement. Top light indicates first hot bearing, second light indicates second hot bearing, and third light indicates third hot bearing. Lights will indicate a maximum of three hot bearings on each train.

**Crew members must keep vigilant lookout when passing these locations and, if hot bearing is detected, train will be stopped promptly and inspection made to locate car with hot bearing. In addition, truck of car with hot bearing will be sprayed with fluor-escent dye marker for identification. All journals on car marked, as well as car ahead, must be inspected.

**When indicator array indicates hot bearing on train, and no dye marker is observed, all journals of train must be inspected.

When hot box detectors actuated, following information is to be reported at next terminal in telegraph message form addressed jointly to Superintendent, Division Engineer, Signal Supervisor, and Chief Dispatcher identified by symbol H.B.

Date and time stopped, and M.P. location.

Train identification.

Car number and location in train.

Box location (1, 2, 3 or 4 from trailing end of car in direction of movement, right or left side).

Disposition of car. (If set out, state where. If inspection shows that it was not necessary to set out even though journal was warm enough to activate the detector, advise what corrective action was taken to permit movement of car. If roller bearing

equipped, so state.)
6. Report all cases where train passes over the detector without an indication having been displayed, but developing a hot box between detector and a point 20 miles beyond detector.

CENTRALIZED TRAFFIC CONTROL

RULE 781. White light which may appear on side of signal housings adjacent to switch is maintainers call light, but when train has been stopped by an absolute signal and white light is observed burning, members of crew will communicate with train dispatcher even though another train may be approaching.

GENERAL REGULATIONS

RULE 822. ADD: When train is starting, stopping, or moving slowly, employes on train must maintain a secure position to avoid personal injury from possible slack action.

RULE 824. SETTING OUT CARS EQUIPPED WITH AB OR ABD AIR BRAKE EQUIPMENT:

Rules require that when cars are set out and a sufficient number of hand brakes are applied brake pipe pressure must be depleted by opening angle cock. This method of securing cars is applicable to cars equipped with AB air brake equipment or cars equipped with the latest type of air brake equipment, the ABD valve.

Any time an angle cock is closed in the train where the brake

SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

pipe pressure is lower than it is elsewhere, the resultant equalization will raise the brake pipe pressure at that point sufficient to release the AB or ABD valve. Equalizing the air in the brake pipe will cause release of brakes throughout the cars, therefore, it is imperative that when cars are set out, regardless of the air brake equipment, a sufficient number of hand brakes must be applied and brake pipe pressure completely depleted by opening angle cock and leaving the angle cock in open position.

At terminals where instructions require application of hand brakes on freight trains, outgoing crews must not release hand brakes until road engine is coupled and brake system

Rail skids are hung on posts at locations listed under sub-divi-sions. When using rail skid it must be placed on rail and leading wheel of first car in descending direction run onto rail skid and hand brakes set if brakes are operative before engine is detached. Train crews picking up cars from these locations must remove rail skid and return to proper locations and locked in place where locks are

provided.

At interlocked railroad crossing at grade, cars or engines must not be cut off nor left within the interlocked limits in such a way as to foul any part of the crossing frog. Cars with short wheel base less than 30 feet inside length as stenciled on side of car should not be left standing on main track in automatic block signal territory and nor within CTC limits nor on CTC sidings unless coupled to another car to prevent possibility of short wheel base car occupying dead section of track.

RULE 827. RULE 827. Dragging equipment detector mounted on post adjacent to detector will display revolving red light when detector is actuated. Crew members must keep vigilant look out when passing and if revolving red light observed, train will be stopped promptly and inspection made of train and track notifying dispatcher of condition found.

Engines running light on descending grade without dynamic brake in operation must stop a sufficient length of time to permit wheel heat radiation if there is indication of overheating. Stop need not be made if in judgment of engineer it is safe to proceed.

RULE 883. Light engines must not be left unattended on grades unless protected in descending direction by derail or spur track switch lined for diverging track. Air brakes must be applied and hand brake on each unit of consist must be applied and chain must be placed under wheels.

First sentence in first paragraph is revised to read as follows:

When an engine is left without an employe in charge, it must when practicable, be placed on track affording protection against entry to main track; hand brakes must be fully applied, wheel secured with blocking chain or if not available other suitable blocking material, reverse lever removed from control stand, generator field switch OFF, engine isolated and cab doors locked.

RULE 958. Employes shall identify the radio station from which they are calling by prefacing their call with the railroad name. For example: 'SP Caboose, Train Second 802, calling SP Engine, Second 802, Over'; and to answer a call, announce, for example: 'This is SP Caboose, Train Second 802, over.'

RULE 962. First sentence is revised to read:

"Radio communication system may be used in lieu of hand, flag or lamp signals prescribed by Rule 12.

AIR BRAKE RULES

RULE 2-A. On departure from locomotive maintenance facility, enginemen must determine by making running air brake test that the independent and automatic brakes are operating

First sentence in second paragraph, Rule 2-B, is revised to read: "When going from power to dynamic braking proceed as follows:

(1) Assure that throttle is in idle position.

Move selector lever to 'off' position.

Pause 10 seconds.

(4) Move selector lever to 'B' or braking position.
(5) Use throttle to control strength of dynamic braking as needed.'

Dynamic brake on head end of freight trains must RULE 2-B. not exceed three 8-axle units, four 6-axle units, six 4-axle units, or

any combination thereof which totals 24 axles, except dynamic brake on EF 415 A, EP 415 A, EF 415 B and EP 415 B classes is limited to five units.

If the maximum 24-axle limit cannot be adhered to due to units in the consist not having dynamic brake cutout switches, then such

units must be isolated prior to using dynamic brake.

When dynamic brake and automatic air brake are used together, the independent brake valve handle must be depressed and held in release position a sufficient time to ensure engine brakes are released.

- RULE 3. A full independent brake application on road locomotive classes EP 636, GF 628, EF 630, EF 636, EF 850B, GF 630, GF 633, and EF 623 results in a brake cylinder pressure of 72 psi. This brake cylinder pressure must be maintained to provide required braking power at very low speeds or when stopped. Under no circumstances must self-lapping portion of independent brake valve be changed except to obtain brake cylinder pressure of 72 psi from a full independent brake application.
- RULE 11. Cars equipped with brake cylinder release valve may have one or two operating release rods. Operating rod connected to brake cylinder release valve may be identified by stencil reading "Br. Cyl. Rel.," or by a diamond shaped stencil or by noting that ends of release rods form a small closed circle. Air brakes can be released on cars equipped with brake cylinder release valve by a hard momentary pull on release rod after brake pipe pressure has been depleted.

Second paragraph RULE 13 is revised to read:

"In case the trouble cannot be corrected or complete air failure occurs from any cause, train must not be moved. Train dispatcher must be promptly notified."

Sixth paragraph RULE 13 is revised to read:

"Should the compressor or main reservoir on the lead engine fail the train must be stopped, automatic brakes left applied, deadengine feature cut in and control of the brakes transferred to the second engine. The train must not be moved beyond the next point where an engine with suitable air equipment can be placed in the lead."

Seventh paragraph RULE 13 is CANCELLED in its entirety.

- **RULE 17.** If, at any time in engineer's judgment, use of retaining valves is required, stop will be made and retaining valves turned up in accordance with his request.
- When two or more trains or engines are working at locations where Mechanical Department forces are not on duty, employes must not couple air hoses or go on, under or between cars for the purpose of making repairs until a member of the crew has notified employes on other trains or engines in the immediate vicinity and yardmaster, where assigned, that work is about to be performed and complete understanding had to prevent movement on the affected track.
- **RULE 23.** The following series of cars are equipped with ABEL brake system which has automatic changeover feature to provide proper brake function when car is loaded and when empty:

75700 - 75799 78500 - 78599 Gondolas Hoppers (Open Top) SSW 333500-334399 SP Gondolas SP 337500-337599 Gondolas SP 345000-345669 Gondolas SP354000-354399 Gondolas 463500-463999 464000-464999 Hoppers (Open Top) Hoppers (Open Top) Hoppers (Open Top) SP SP SP 467500-467549 SP 480000-480193 Hoppers (Open Top) SP 491000-491059 Hoppers (Covered) SP 492000-492039 Hoppers (Covered) SP500604 Flat Car SP 590000-590099 Flat Cars

- Conductor must contact engineer at designated locations and inform him of the air brake pressure shown on the caboose gage. Engineer must immediately repeat the air brake pressure figure back to the conductor. If radio communication is not distinct train must be stopped by use of automatic air application. Train may proceed after complying with Air Brake Rule 6.
- RULE 26. When temperature is 32 degrees or less, running test may be made (Rule 29) in lieu of last paragraph of Air Brake Rule 26.

Engineer will, after informing train crew in caboose that running test is to be made, make sufficient brake pipe reduction and allow sufficient time for brakes to apply on caboose before releasing brakes.

Trainmen will observe that brakes apply on caboose and that brake pipe pressure as shown on caboose gauge is being properly

restored and notify engineer accordingly.

When temperature is 32 degrees above zero or less, air brake system on locomotive must be blown out before coupling to train, as

Place automotive brake valve handle in running position, then open angle cock at rear of locomotive, move brake valve handle suddenly to release position, causing heavy flow of air throughout the brake pipe, which should blow out any condensation that may have accumulated in the brake system.

Before road test is made on any freight train after locomotive has been coupled thereto, blow out air brake pipe hoses on head end

of train as follows:

After making a 20-pound brake pipe reduction, close angle cocks between second and third cars, uncouple air hose; close angle cocks between first and second cars, uncouple air hose; close angle cocks between first car and locomotive, uncouple air hose. During this test enginemen must drain condensation from lead unit by opening drain cocks and blowing out condensation from air compressor intercooler and aftercooler, main reservoirs, control reservoir, dirt collectors, air filters and strainers. After recoupling hoses and reopening angle cocks, release train brakes. Before proceeding, it must be known that brake pipe pressure, as indicated on caboose gage at rear of train is properly restored.

If unable to obtain proper air brake test while running, train must be stopped and air brake hose on head end blown out as pre-

scribed in last paragraph Air Brake Rule 26.

RULE 60. On descending grades train air brakes must be used in conjunction with dynamic brakes unless air brake application would cause train to either stop or retard speed excessively below that which is authorized.

MISCELLANEOUS

Helper service:

(a) When helper engine is placed behind caboose, not more than 2 operating units or 4000 operative, horsepower will be used.

(b) When helper engine is placed immediately ahead of caboose a combination of not more than 18 axles nor more than 7500

operative horsepower will be used.

(c) Helper engines consisting of more than 12 axles must not be placed directly behind 80 foot or longer trailer flatcars. Empty 85-foot long or longer equipment must be entrained ten or more cars behind road engine and ten or more cars ahead of helper engine in territories where grade is 1.8 percent or over and curvature is 10 degrees or more.

A flat with one van or one container either loaded or

empty will be considered as an empty.

These instructions will not apply to trains 365/366, 375/376, 377/378, TFC Special, Advance FMS, BAX or OVEXA.

District where these restrictions will apply are:

Roseville and Dunsmuir Roseville and Sparks.

(d) When helper engine is placed directly ahead of caboose, additional helper must not be coupled behind caboose. Helper engines must be separated by at least 20 cars.

Air will be cut in on all helper engines, and engine must not be coupled or uncoupled while train is in motion.

(f) When helper engine is shoving on ascending grade, throttle must be reduced as train speed reduces, then throttle regulated so that amperage will be approximately the same as indicated before train speed reduction.

(g) Roseville to Norden

On trains of less than 5000 tons and under 100 cars, single unit helpers will be placed on rear of train.

On trains over 5000 tons or 100 cars, helpers of more than single unit must be cut in at least seventeen (17) cars ahead of caboose.

Sparks to Norden

On trains of less than 5800 tons and less than 100 cars, single unit helpers will be placed at rear end of train.

On trains of 5000 tons or more and over 100 cars, two unit helpers must be cut in at least 15 cars ahead of caboose.

- 2. Trailer flat cars, tri-level automobile carrying cars and 30,000-gallon "Super Tanker" tank cars, all 80 and 85 feet long. "Jumbo" tank cars HYDX 701 to 706, inclusive, loaded or empty, without authority of Chief Train Dispatcher must not be operated on any branch, on west leg of wye at Chico, or on industry, yard tracks, or interchange tracks within Sacramento yard limits. These cars can be operated on 12th St. yard tracks, new yard, 6th St. yard, levee tracks, freight leads, back leads and Depot No. 1, in Sacramento.
- Rotary snow plows will not clear certain structures, tunnels and cuts with wings extended; be governed by instructions posted in rotary cab.

Rotary snow plows must come to stop when train or engine is

passing on adjoining track.

Flangers operating in snow territory must raise flanger blades and stop while train or engine is passing on adjacent track.

Engines operated with engineer in other than lead unit in direction of movement, must not exceed 20 MPH when approaching highway or street crossings at grade, subject to further restrictions imposed by local conditions.

All flats USAX and DODX series 38016-38665 which includes 617 FM type and 21 DF type and USAX and DODX series 39095-39199, FM type are restricted to movement on rear of train and be-

hind any helper.

SPMW 6400-6439-100 Ton air dump cars, weight of car and lading 263,000 lb. Gross weight of subject cars cannot exceed the gross weight shown in Timetable Special Instructions or Line Clearance Circular for each branch line. Also, cars must not be dumped on curves of 25 degrees or more, or operated through curves of 35 degrees or more.

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 When only AS 415, AF 420, ES 412 and ES 415 units are used in engine consist, not more than two units may be on the line when making a reverse movement with cars or train and must be located adjacent to the train.

When operating with mixed engine consist, where dynamic brake is required, not more than two AS 415, AF 420 and ES

415 units will be used.

A. If one unit is used, it will be placed as the second unit.
 B. If two units are used, units must be placed as the second and third units in consist.

C. A road unit must be coupled against the train.

D. If necessary to make a reverse move with cars or train, lead unit must be isolated.

3. ES 412 class unit will not be used in mixed consist per Item 2

account not equipped with #24 MU wire.

4. If necessary to operate with more than two AS 415, AF 420, ES 412 and ES 415 class units in consist (including pick up of units from outlying points), these units must be placed in the lead. Under these conditions, if reverse move is made with cars or train, all units ahead of the two rear units in these classes will be isolated.

 AS 415, AF 420, ES 412 and ES 415 class units must not be used in swing or cut-in helper service. No more than two of these units can be used as helper on rear end of train behind

or immediately ahead of caboose.

 Extreme caution must be used during dynamic braking or when making reverse moves to prevent jackknifing and track damage.

26. When average weights of cars in trains other than locals or switchers is more than 60 tons per car, do not handle any cars which weigh less than 50 tons within five cars of road engine.

SPECIAL INSTRUCTIONS - ALL SUBDIVISIONS

SPEED RESTRICTIONS FOR ENGINES: Maximum speed shown below is subject to further restriction applicable to certain territories as shown in Speed Restrictions for Trains:

Maximum Speed for Engines — Length of Diesel Units (Between Pulling Faces of Couplers)

road switcher type

CLASSIFICATION	MAXIMUM SPEED EXCEPT (#)	LENGTH (Feet)	CLASSIFICATION	MAXIMUM SPEED EXCEPT (#)	LENGTH (Feet)
AF420-1	70	57	ES410-1	60	44
AF624C-1	70	67	ES410E	65	44
AF624-1	70	67	ES410-2	65	44
AF628-1, 2	70	70	ES412C-1 to 5	65	44
AF630-1	70	70	FC410 1 to F	65	
AF640-1	70	59	ES412-1 to 5	65	44
PP415C 1		56	ES415-1, 2, 3		45
EF415C-1	70		ES415C-1, 2, 3	65	45
EF415A-4 to 9, 11	70	51	ES615-1, 4	55	61
EF415B-4 to 7, 9, 11, 13	70	50	EP415A-1 to 4	79	51
EF418B-1	70	50	EP415A-5	79	55
EF418-1 to 9	70	56	EP415AC-1	70	55
EF418C-1, 2	70	56	EP415B-1, 2, 3	79	50
EF418E	70	56	EP418-1 to 5	70	56
EF618-1 to 5	70	61	EP636-1	70	71
EF420C-1, 2	70	56	FP624-1, 2	70	66
EF420-1, 2	70	56	AS407-1	60	44
EF423C-1	70	56	AS409-1 to 5	60	45
EF423-1	70	56	AS410-2 to 5	60	45
EF425C-1, 2, 3	70	56	A \$410 G	60	
EF425-1, 2, 3, 4	70	56	AS410-6		46
EF618E	70	61	AS415-1	65	54
			AS416C-1, 2, 3	75	57
EF623	70	66	AS416C-4, 5	65	57
EF625-1	70	61	AS418-1 to 6	70	57
EF430C-1	70	59	AS618-1	70	58
EF630-1, 2	70	66	BS410-2	60	49
EF636-1, 2, 3, 4, 5, 6	70	66	BS410-4	60	46
EF636C-1, 2, 3, 4	70	65	BS412-1 to 4	60	46
EF642	70	70	ES406-2, 3	45	44
EF850B-1	70	88	ES408-1 to 4	65	44
GF425-1, 2, 3	70	60	ES408B-1	65	44
GF428-1	70	60	ES409-1, 2	65	44
GF628-1	70	67	ES615-1 to 4	70	61
GF630-1	70	67	FS412-1, 2, 3	60	49
GF633	70	67	FS412-1, 2, 3 FS412-4, 5	60	
CFCCC	70	67	F5412-4, 0		46
GF636C			GS407-1, 6	55	37
GF850-1	70	84	Any locomotive not listed	35	_

#When operated in multiple unit control, on headend of train or running light and engineer is in other than the leading control cab in direction of movement, speed must not exceed 30 mph. 'A' type units (indicated by letter 'A' following classification numerals) operating in reverse as lead unit in direction of movement must not exceed 30 mph.

SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

D&RGW & UP diesel units, when used, will be permitted maximum freight train speeds but will not exceed maximum speed stenciled in cab of each unit.

NOMINAL CLASS	RUNNING FORWARD WITH TRAIN OR LIGHT	RUNNIN BACK- WARD WITH TRAIN O LIGHT	
WPRR D-176 (801 to 805)##	79	*30	
WPRR D-225 (901 to 912)	65	**55	
WPRR D-239 (913 to 924)	65	**50	
WPRR S-50 (501 to 503)	45	**45	
WPRR S-50 (504 to 511)	35	**35	
WPRR S-57 (551 to 564)	35	**35	
WPRR S-57 (559 to 564 in mul.)	30	**30	
WPRR S-60 (581 to 585)	65	**60	
WPRR S-62 (601 to 606)	30	**30	
WPRR RS-62 (701 to 713, 725 to 732)	65	**60	
WPRR D-62 (801-D)	65	**50	
WPRR D-64 (2001 to 2010)	65	**60	
WPRR RS-65 (3001 to 3010)	70	**60	

##Units 801-A & 802-A maximum speed 65 MPH

*When on head end of train or running light and engineer is in other than leading control cab in direction of movement.

** When operated in multiple unit control with engineer in other than lead unit in direction of movement must not exceed 30 MPH.

SNRY and CCT engines will not exceed speed restrictions for engines shown in SNRY and CCT timetables and maximum speed is subject to further restrictions applicable to certain territories as shown in speed restrictions for trains.

Engines handled dead must not exceed speed shown in table. Dead diesel engines hauled in train and weighing 100,000 pounds or more must be placed first behind engine handling the train. If weight is less than 100,000 pounds dead diesel engines must be placed near rear of train.

Dead or disabled engines, which require movement at reduced speed must first be reported as ready to move to the chief train dispatcher, who will designate the train in which the engine is to be moved and location in train in which it is to be placed. Any such engine must not be handled in train until train order designating maximum speed is issued.

Movement of foreign line engines, in service or dead in train, must not be authorized until provisions of current Line Clearance

Circular have been complied with. Light engines are authorized to operate at column 1 speeds except on descending grade without dynamic brake in operation must not exceed column 2 speeds.

MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT	MPH MAIN TRACKS OTHER THAN BRANCHES	MPH MAIN TRACKS ON BRANCHES	
Double or triple loads		25	
Scale test cars, except:	40	30	
SPMW 2024	65	49	
Locomotive Cranes: (SPMW 4027, 4080, 4088, 4091, 4542, 4543, 5479, 5849, and 5595)			
With boom disconnected and counterweight			
forward,	45	25* 25*	
EXCEPT SPMW 5595	40	25**	
With boom disconnected and light end forward	20*	15	
With boom in place, either end forward	25*	15	
Steam Pile Drivers:	20	10	
(SPMW 3402)		-	
With leads removed and secured	45	25*	
(SPMW 4052 and 4053)	35	25*	
Relief outfits with steam derrick, except:	45*	25*	
Relief outfits 7070 and 7110 must not exceed 35 MPH* on main tracks other than		~	
branches.			
(Relief outfits 7070 and 7110 must not be operated on any branch.)			
Rotary snow plows:			
Electrified	35	15	

*These speeds must not be exceeded, and on curves where authorized speed is more than 15 MPH speed must be reduced to 5 MPH less than shown in timetable and on speed signs.

OTHER MAXIMUM SPEEDS	MPH PASSEN- GER TRAINS	MPH FREIGHT AND MIXED TRAINS
Passenger trains, with caboose	65	
Engine and caboose only, except must not exceed speed for same engine running forward light.		65
Engine and flanger only, except		45
On curves		35
Logs loaded on flat or logging cars, except		35
On curves		25
ing stations		15

All cars handled in passenger trains must be equipped with steel-tired or all-steel wheels. Cars not so equipped must move in freight trains, passengers if any, to move on passenger trains.

Passenger carrying cars, baggage, express and other head-end cars, unless equipped with steel center sills and steel platforms must not be handled in passenger trains except on authority of Super-

Freight cars must not be handled behind occupied passenger carrying cars, except in mixed trains in military or naval movements.

Baggage, express, mail, refrigerator or other head-end cars must not be handled on rear of passenger trains unless trainmen can pass

through them.

Where mail, papers, or ice are to be dispatched from passenger trains at points where train does not stop, slow down sufficiently to permit safe dispatch without hazard, and stop at such stations for this purpose if train is moving on adjoining track between passenger train and point of exchange.

SPECIAL INSTRUCTIONS — ALL SUBDIVISIONS

When moving against current of traffic, or when movement is not protected by block signals, speed of passenger trains and light engines must not exceed 59 MPH, and speed of freight trains must not exceed 49 MPH, nor may speed exceed that applying to normal operation. Unless proceed signal received, or it is known that warning devices are operating, such trains and engines must stop approaching road crossings where automatic warning devices are installed, and may proceed after member of crew protects crossing.

Unless otherwise authorized, trains handling passenger cars with flat spots on wheels in excess of 31/4 inches in length must not exceed 10 MPH. When flat spots are not in excess of 31/4 inches long such cars may be operated at maximum authorized speeds.

28. Freight and mixed trains containing no restricted cars are authorized to operate at Column 1 speeds not exceeding 60 MPH (65 MPH when specifically authorized) except where specifically restricted to Column 2 speeds, provided trains do not exceed:

Number of care	er	Tons per Operative Brake
70		. 70
75		60
80		60
85		CT.
90		CC
95		CF
100		0.4
105		69
110		
115		01
120		CO
125		FO
130		56
135		
140		FO
145		50

- 29. By Decision No. 74486 dated August 6, 1968, California Public Utilities Commission's General Order 26-D revised as follows.
- 2.5. If freight cars of a height greater than fifteen (15) feet six (6) inches are transported or proposed to be transported, minimum overhead clearances shall be increased by an amount of not less than such additional height provided that box or other house cars sixteen (16) feet ten (10) inches or more in height are exempt from this subsection when the top running boards have been removed, ladders and hand brakes lowered, cars painted, stenciled, and otherwise modified in compliance with the provisions of Section 131.24 of Part 131, U.S. Safety Appliance Standards (Railroad), and provided that if train length permits any such cars. Shall be trained at least five (5) cars distant from caboose.
- **7.4** All open top cars with lading extending laterally in excess of five (5) feet five (5) inches from centerline of car shall if train length permits be trained at least five (5) cars distant from both the caboose and the engine.
- 7.8 Cars on which the lading exceeds fifteen (15) feet six (6) inches above top of rail if otherwise in compliance with these requirements as to width of lading and the nature of which precludes the probability of employees getting on top of or passing over them are exempt from the conditions of this section, provided, however, that if train length permits, any such cars except cars transporting highway trucks or trailers, multi-level freight cars either loaded or unloaded, and automobile underframe cars, shall be trained at least five (5) cars distant from caboose. For the purpose of this Section, automobile underframe cars are either special flat cars upon which automobile underframes are stacked and firmly secured in a horizontal position or gondola cars in which such underframes are placed on end and firmly secured to said gondola cars.

Public Service Commission of Nevada Case No. 1159, dated April 15, 1964, provides blanket authorization for movement of high-cube box cars seventeen feet above top of rail over all SP tracks and WP tracks over which SP operates in the State of Nevada, under the following conditions:

- If train length permits, such cars shall be trained at least five cars distant from caboose.
- 2. The crew of each train containing freight cars herein authorized to be operated shall be informed by an appropriate train order that the consist of the train includes freight cars of such excess height and that members of the train crew are forbidden to ride on top of any such cars.
- Any yard crew required to handle freight cars herein authorized to be operated shall be notified by its supervising officials of the presence of such cars in said yard.
- Instructions to be issued to all road and yard crews forbidding them to ride on the tops of the cars herein authorized to be operated.

Advance notice must be furnished by Superintendents to connecting divisions advising them of movements of such cars in order that the above requirements may be complied with.

RULE 21. Identification of superior trains via Corning may be made at Red Bluff or between Red Bluff and Tehama and such identification will apply at Tehama.

RULE 82A. Dunsmuir Yard: Westward train will obtain clearance OK'd by Chief Train Dispatcher. Westward trains originating

Westward regular trains via Corning must be authorized at Red Bluff by clearance bearing the OK, time and initials of the Chief Train Dispatcher and specifying green or no signals as required.

Extra trains originating at Redding and operating Redding. on the Matheson Branch between Redding and Matheson, will display engine number on the lead unit leaving Redding and are authorized to operate as extra trains between Redding and Matheson.

Extra trains originating at Sugarfield and oper-Sugarfield: ating on the Knight's Landing Branch between Sugarfield and end of branch, MP 101.0 will display engine number on the lead unit leav-ing Sugarfield and are authorized to operate as extra trains between

Sugarfield and end of branch without clearance.

Extra trains and engines operating in below listed territories must register destination of trip, turning point, and date and time of departure in column captioned "Signals." When trip has been completed, date and time of arrival at initial station of trip must also be entered in column captioned "Signals." Extra trains or engines on route into these territories must not leave the initial station until it has been ascertained from the train register that all preceding trains or engines via the route to be used have completed their trips and registered time and date of arrival at initial station of trip accordingly:

Territory	Location
Knight's Landing Branch Sugarfield – End of Branch MP 101.0	Sugarfield
Matheson Branch Redding-Matheson	Redding
DIN F 00 A At the College of stations con	. the tuning indi

RULE 83-A. At the following stations, only the trains indicated will register:

Woodland-Trains originating or terminating, Orland-Trains originating or terminating. Sugarfield—Trains originating or terminating. Redding-Trains originating or terminating.

Red Bluff-Regular trains via Corning and trains originating or terminating.

RULE 83-B. At open train-order offices, trains may register by ticket as follows:

Davis-All trains to or from West Valley Subdivision. Red Bluff-Regular trains via Corning.

RULE 85. A section must not pass and run ahead of another section of the same schedule in CTC limits or on double track between Red Bluff and Tehama without first exchanging train orders with the section to be passed, each section to display signals if necessary.

Yard limits in which the provisions of Rule 93 will **RULE 93.** apply are established at the following stations:

West M	P	East MP
74.20	Davis (Dixon line)	77.37
	Davis (Tehama line)	78.00
83.66	Woodland	85.82
	Woodland (Knights Landing Branch)	88.00
147.96	Willows	150.84
164.48	Orland	167.72
177.62	Orland (Colusa Branch)	
176.50	Corning	181.00
211.82	Gerber	
120.00	Grimes	
169.00	Hamilton	171.00
100.00	Redding (Matheson Branch)	

Dunsmuir Yard: Westward train leaving yard track or from Main Track will sound whistle signal — o — when opposite microphone on pole just west of Little Castle Creek Bridge, MP 320, for train dispatcher to line derail and switch to main track at west end, Dunsmuir Yard.

RULE 97. Extra trains must not operate via Colusa Branch unless authorized by train order.

RULE D-97. Applies from CTC limit at east end Gerber to CTC limit at west end Tehama.

RULE 98. Drawbridges not interlocked:

Drawbridge 94.14, Knights Landing Branch: mento River—Stop within 200 feet of drawbridge. Over Sacra-

RULE 99-A. Dunsmuir: Flag protection to rear of train is not required when standing or delayed on Main Track between eastward absolute signal at west end Dunsmuir Yard and westward absolute signal at east end Dunsmuir except when rear of eastward train on Main Track is between Signal 3222 and absolute signal at the east end Dunsmuir.

RULE 99-C. Will apply on Colusa Branch, and between Tehama and Davis.

RULE 103-A. Trains and engines must stop and be preceded by flagman before crossing highway at:

Woodland......Main St. crossing on house track.
Orland.......Spur Track No. 3339, serving Murco Produce
crossing Tehama Street.

Passenger trains stopping at Redding station will stop clear of impulse circuit indicated by white marker on platform, to permit crossing gates to raise. When train starts, proceed slowly to permit gates to lower after passing impulse circuits. Sound detector microphones adjacent to track just east of Yuba St. for westward movements and just west ot Tehama St. for eastward movement. Trains stopped to receive or discharge traffic must sound whistle to activate gates and crossing must not be entered until gates are down.

RULE 104. The normal position of rigid switches at junctions:

Woodland Knights Landing Branch, for movement from

siding to Knights Landing Branch, Harrington ...Colusa Branch, for siding, WyoColusa Branch, for siding, Redding......Matheson Branch, for Silverthorn line.

RULE 105. Davis: North siding is first track west of main track on Gerber line extending from MP 75.79 to MP 76.52.

Siding is second track of the two tracks paralleling Wyo: main track.

Redding: Siding is first track on south side of main track extending from MP 258.68 to MP 256.58. This is not a controlled siding and all movements must be made with caution not exceeding 15 MPH.

Trains to or from East Valley Subdivision with the **RULE 204.** same conductor and engineer operating through Tehama may be issued train orders on East Valley Subdivision or West Valley Subdivision that affect their movement on either of these subdivisions.

RULE 221. Red Bluff is a train order office for westward trains via Corning only.

RULE D-251. Applies between MP 211.88 Tehama, and MP 214.9 Gerber, on eastward and westward main tracks.

Dunsmuir Yard: Unit for display of flashing yellow installed on mast of westward absolute signals at west end main track and siding, MP 319.61.

RULE 306. The following block signals, equipped with tri-angular plate displaying the letter "P," have included in their control limits some special protective device.

SPECIAL INSTRUCTIONS—WEST VALLEY SUBDIVISION

	Eastwa	rd Protection	Westward
	P-1132	Collision barricade detector, MP 113.3	. P-1137
	P-1182	High water detector, bridge 118.88	P-1197
	P-1368	High water detector, bridge 137.10	P-1381
	P-1748	High water detector, bridge 176.21	P-1769
Ę.	P-A	Spring switch west end siding Redding	1 1100
Ē,	P-2388	High water detector, Bridge 239.88	P-2403
	P-2720	Fire detector, Pit River Bridge	P-2743
	P-2720	Slide detector fences, MP 273.70 and 274.10	P-2743
	P-2882	Fire detector, bridge 288.50, and	
		Slide detector fence, MP 296.00	P-A
	P-3024	Slide detector fence, MP 302.70	P-A
	P-3050	Slide detector fence, MP 305.60	P-3061
	P-846	Collision detector barricade MP 85.30	P-855
	P-846	Collision barricade detector, MP 85.4	P-855
	P-898	Collision barricade detector, MP 89.7	P-903

RULE 505. **AUTOMATIC BLOCK SIGNAL SYSTEM**

RULE 516. Overlap posts:

Westward Trains: Wyo-at fouling point east switch of siding.

RULE 535. SPRING SWITCHES

Spring switches equipped with facing point locks are located as follows:

Location	Normal Position
Redding	West end siding Main track

RULE 705. LETTER TYPE INDICATORS

Indicators located as follows:

Illum. Letter	On Signal	Approaching	Authorizes and require movement as follows:
s	P-A	. Redding, west	Enter siding
w	. MP 319.9 .	South 1st St. Crossing, Dunsmuir Yard.	West trains on main track or sidings when indication illuminated must stop short of South 1st St. crossing and wait until illumination extinguished.

RULE 705. HOT BOX DETECTORS

Illum. Letter			Location of Readout
Н	2387	.Draper	. Westward Absolute Signal W.E. Draper
	2388		•
W	2403	. Draper	
Н	2418	. Culp	Eastward Absolute Signal E.E. Culp
Н	2647	. Silverthorn	
W	2689	. Central Valley	0
		. Gray Rocks	Eastward Absolute Signal E.E. Gray Rocks
Scanner S	Site		- AMERICA
MP		Direction	Location
240.0 267.5		East and West East and West	Draper-Culp Central Valley-Gray Rocks

Refer to Rule 705-All Subdivisions.

RULE 760. CENTRALIZED TRAFFIC CONTROL.

Limits extend from eastward absolute signal at east end double track, Gerber, to east switch, Dunsmuir.

TEHAMA: Eastward "SA" signal at west switch of west crossover Tehama on West Valley route governs movement through crossover to eastward main track; eastward "SA" signal west of Tehama crossovers on East Valley route governs movements to eastward main track.

Westward two-unit "SA" signal at west end double track Tehama on westward main track:

Top unit governs movement to West Valley route. Bottom unit governs movement to East Valley route.

Westward dwarf "SA" signal at west end double track Tehama on eastward main track governs movements to either West or East Valley route.

Redding: Dwarf type indicator for display of flashing white light located on siding, west side of South Street, and when displayed will authorize train to proceed on siding to absolute signal at east end siding. Restrictions that may be imposed by other signals or Rule 513, must be complied with.

Indicator for display of illuminated "Wait" located on mast of main track signal 2582 at east switch No. 1 track. When illuminated, requires eastward trains to wait west of South Street.

When held by these indicators, member of train crew must contact Dispatcher by phone and be governed by his instructions.

Three-unit absolute signal at the east end of siding at Lakehead

governing westward trains is equipped with a "call-on" signal.

Top Unit			Governs movement on main track,
Middle Unit			Governs movement to siding,
Bottom Unit			Governs movement to house track,
Call-on Signal			
(Flashing Yellow)			Proceed to couple to train on main

track or siding.

Helper engine that is to move and couple to a train on main reciper engine that is to move and couple to a train on main track or siding after receiving proper absolute signal indication, must stop on short track circuit, just east of 3-unit absolute signal, and wait for "call-on" signal to operate. When call-on signal displays a flashing yellow, it confers authority to pass the 3-unit absolute signal indicating "stop," and move to the train occupying the main track or siding after such train has stopped and hand signal is received from member of train crew.

Telephone for communicating with train dispatcher located at:

Signal 2596, 2597, 2721, 2828, 2829, 2837, 2838, 2868, 2869, 2882, 2883.

GENERAL REGULATIONS

RULE 825. Instructions for setting hand brakes:

Dunsmuir and Dunsmuir Yard:

Passenger trains	Three brakes on east end,
Freight trains or cuts of	
25 cars or less	Ten brakes on west end.
Freight trains or cuts of	Ten brakes on west end,
26 to 50 cars	
Freight trains or cuts of	Ten brakes on west end,
over 50 cars	

Employee releasing any of these brakes must set an equal number to replace them, except when preparing train for departure. Staff brakes on freight trains must be set with the assistance of a brake club after train has stopped.

Dunsmuir Yard: Hand brakes will not be set on freight trains if outgoing crew takes charge of train on arrival unless engine is detached.

Hand brakes will not be set on passenger trains Dunsmuir: standing at the station unless engine is detached provided conductor has reached understanding that engineer will remain on engine at all times and control train by use of air brakes.

Portable rail skids are hung on posts at lower end of sidings at Central Valley, Gray Rocks, Lakehead, Delta, Lamoine, Gibson, Sims, Conant and Castle Crag.

When necessary to leave cars on these tracks, permission must first be obtained from chief train dispatcher. See all Sub-Divisions, Rule 825.

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SPECIAL INSTRUCTIONS - WEST VALLEY SUBDIVISION

RULE 827: Gray Rocks-O'Brien: Dragging equipment detector, MP 268.9, west of Gray Rocks, and MP 279.2, east of O'Brien. Refer to Rule 827, All Subdivisions.

AIR BRAKE RULES FREIGHT AND MIXED TRAINS

RULE 17. Retaining valves must be used on descending grades as follows:

Dunsmuir Yard and Delta, Middle Creek and Matheson.

WITHOUT DYNAMIC BRAKE IN OPERATION: One retaining valve for each 80 tons in train. If gross tonnage exceeds 80 tons per operative brake, retaining valves must be used on all cars and speed must not exceed 15 MPH.

WITH DYNAMIC BRAKE IN OPERATION:

Permissible Tons Per Unit Without Retaining Valves*

Basic	Extended Range
Dynamic Brake	Dynamic Brake
4 Axle 6 Axle	4 Axle 6 Axle 8 Axle

With dynamic brake in operation but without pressure maintaining system of braking:

Dunsmuir Yard and Delta	1550	1300	1950	2600
Middle Creek and Matheson 525	775	650	950	1250

With dynamic brake in operation and with pressure maintaining system of braking.

Dunsmuir Yard and Delta	2850	2325	3500	4650
Middle Creek and Matheson	2250	1800	2700	3600

If permissible tonnage is exceeded, one retaining valve must be

used for each 150 tons in excess thereof.

Locomotive classes AF 628, AF 630, EF 425, EF 623, EF 625, EF 630, EF 636, GF 425 (except units 6700-6727), GF 628, GF 630, GF 633, EF 850B and GF 850 are equipped with extended range dynamic breken. namic brake.

*If any unit having basic dynamic brake is operated with units having extended range dynamic brake, all units in consist must use tonnage authorized for units having basic dynamic brake.

RULE 24-B. Dunsmuir Yard and Dunsmuir: Incoming engineer, after completing stop, must make a full service brake application leaving brakes applied. When outgoing crew takes charge of train on arrival or otherwise is assured, upon request, that continuity of brake pipe has not been disturbed, engineer will release brakes and proceed.

Middle Creek and Matheson. nage per operative brake - 80 tons; except with dynamic brake and pressure maintaining system of braking in operation; with not more than 20 cars for each six axles of dynamic brake; with speed not exceeding 20 MPH, and with all retaining valves on loaded cars in high pressure position - 100 tons.

Should dynamic brake failure occur while handling in excess of 80 tons per operative brake, train may proceed at speed not exceeding 15 MPH, if in judgment of conductor and engineer it is safe to do so, and provided retaining valves are used as prescribed by Air Brake Rule 17.

Restrictive grades are as follows:

Westward Between Sims	MP to	MP to MP		
and Gibson	307.6	306.3	25	
	MATHESON BI	RANCH		
Westward	263.0	260.6	20	
Eastward	264.1	265.0	20	

MISCELLANEOUS

- Eighty-five foot tri-level flat cars, loaded or empty, must not be handled over Matheson Branch.
- Engines listed are not permitted to operate on tracks 10. shown below:

Class of Engine	Restricted Tracks
All engines and carsCrane spur off Koppers	Company spur at
MP 246.4 (west of Ande	
All engines and carsGray Rocks—Beyond ro Calaveras Cement Co.	estriction sign on Track No. 2.
All enginesMiddle Creek. Over struwick Dam Spur.	cture 260.87, Kes-

11. Load limit (car and contents):	
Davis-Tehama	315,000 pounds
Tehama-Dunsmuir	315,000 pounds
Woodland-Robbins	240,000 pounds
Harrington-Hamilton via Colusa	240,000 pounds
Hamilton-Wyo	281,000 pounds
Redding-Matheson	251,000 pounds
Except gondola cars, series SP	
345,000 to SP 345,699	240,000 pounds

Unless authorized by Superintendent, heavier loads must not be handled.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

MP		Location	Description
89.26	Yolo	Cache Creek bridg	geOverhead
167.72	West of Hamil	tonStony Cree	k bridgeSide
94.14	Knights Landi	ngKnights La	nding bridgeSide
300.00	Lamoine	Bridge on siding	Side
301.80	Lamoine	Bridge No. 6	Overhead and side
302.20	Lamoine	Bridge No. 7	Overhead and side
305.30	Gibson	Bridge No. 8	Overhead and side
305.40	Gibson	Tunnel No. 13	Overhead and side
306.70	Fisher	Bridge No. 9	Overhead and side
310.60	Sims	Bridge No. 13	Overhead and side

SPECIAL INSTRUCTIONS—WEST VALLEY SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in SPEED RESTRICTIONS FOR ENGINES appearing on pages 6 and 7, and MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT and OTHER MAXIMUM SPEEDS appearing on page 7 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE SAFETY, REGARDLESS OF TIME.

TERRITORY PASSEN- FREIGHT AND TERRITORY MIXED		PASSEN- GER TRAINS	FREIGHT AND MIXED								
MP	MP	Column:	1	2		MP	MP	Column:	1	2	
	RD, DAVIS TO				100	WESTWA	ARD, GERBI	ER TO DAVIS:			
75.60 to	76.00		40	40		213.80 to	185.90		35	35	
76.00 to	81.80		70	60		185.90 to	178.90		70	60	
81.80 to	84.40	***************************************	65	60		178.90 to	178.00 (Corr	ning)	40	40	
84.40 to	85.50 (Woodland	1)	40	40		178.00 to	165.70		70	60	
86.00 to	86.02		65	60		165.70 to	165.50 (Orla	and)	60	60	
149 50 to	149.50 150.00 (Willows)		70 40	60 40				ows)	70	60	
150.00 to	165.50	***************************************		60		149 50 to	86.02		40 70	40 60	
165.50 to	165.70 (Orland)		60	60		86.02 to	85.50	******************************	65	60	
165.70 to	178.00		70	60		85.50 to	84.40 (Wood	dland)	40	40	
178.00 to	178.90 (Corning)		40	40					65	60	
178.90 to	185.90		70	60					70	60	
185.90 to	186.29 Beginning	g of D.T	35	35		76.00 to	75.60		40	40	
186.29 to	211.84		25	25							
211.84 to	213.80		35	35							
MANUEL	CONTRACTOR OF THE PROPERTY OF					GERBE					
	RD, GERBER TO	0				321.30 to	321.12 Track	No. 1	25	25	
DUNSN	IUIR:		100000000			321.30 to	319.61 Track	No. 2	15	15	
213.80 to	214.90		70	60				66)	25	25	
214.90 to	223.18		70	60					45	45	
223.18 to	224.39 (Red Bluff 226.61	()	45 60	45 60		285.93 to	281.00		60	55	
226.61 to	233.60		65	60				• • • • • • • • • • • • • • • • • • • •	45 65	45 65	
233.60 to	242.46		70	60		261.17 to	259.66		60	60	
		-				259.66 to	258.00 (Redd	ing)	45	45	
	243.74		65	60		250.00					
243.74 to	247.02 247.27		70	60					70	60	
247.02 to	258.00		60 70	60 60					60 70	60 60	
258.00 to	259.66 (Redding)		45	45					65	60	
259.66 to	261.17		60	60		242.46 to	233.60		70	60	
261.17 to	269.05		65	55		233.60 to 2	226.61		65	60	
269.05 to	281.00		45	45		226.61 to 2	224.39		60	60	
281.00 to	285.93		60	55				Bluff)	45	45	
285.93 to	288.66 (295.60)		45	45					70	60	
295.60 to	322.57		25	25					25	25	
321.90 to	321.30		25	25	100	214.76 to 2	213.80	•••••	35	35	
	RD, HARRINGTO	ON TO				WESTWA	RD, WYO T	O HARRING-			
	/IA COLUSA):						IA COLUSA				
	120.70		***	35						15	
121.30 to	121.30 (Grimes) . 169.98			15					***	49	
169.98 to	170.00 (Hamilton)		35 15		170.50 to 1	170.00			35 30	
170.00 to	170.50	/		30	3110	170.00 to 1	169.98 (Hami	lton)		15	
	71.15			35						35	
71.15 to 1	180.24			49		121.30 to 1	120.70 (Grim	es)		15	
80.24 to 1	180.46			15	2	120.70 to 1	108.81			35	
EASTWAF	RD, WOODLANI	то				WESTWAI	RD, ROBBIN	IS TO			
ROBBIN		. 10				WOODL		10 10			
85.56 to	87.70			25		101.00 to	87.70			10	
	01.00			10		87.70 to	85.56		***	25	
ATHESO	ON BRANCH:					MATHESO	N BRANCE	Į.			
EASTW	ARD, REDDING	TO					ARD, MATH				
MATHE	SON			25		REDDIN	IG			25	
		1	1								

At Woodland, Willows, Orland, Corning and Anderson when engine passes last crossing within limits of restriction in direction of movement, speed may be resumed to that shown on next speed sign.

Limits within which trains are specifically authorized to operate at Column 1 speed not exceeding 65 MPH under the conditions specified in All Sub-Divisions, Page 8, Miscellaneous, Item No. 28.

MP 75.60 and MP 185.90.

MP 214.90 to MP 258.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other tracks, wyes, balloor	1
tracks, crossovers and turnouts, except:	. 15
Through turnouts on other than sidings	. 10
On branches	. 10
On gravel pit tracks - Cory	
Through sidings and turnouts at Rawson, Blunt Culp, Draper, Girvan, Silverthorn, Central Valley	
Gray Rocks, O'Brien, Mead and Lakehead Through sidings and turnouts at Delta, Lamoine	. 25
Sims, Conant and Castle Crag	20

RULE 10-J. Speed signs placed to left of track: Westward at MP 145.88 reading 45.

RULE 26-A. Roseville: See Roseville Subdivision regarding indicator lights Tracks 71, 72, 73 and 74 PFE icing platform.

RULE 82-A. Extra trains originating Chico and operating between Chico and Stirling City will display engine number as an extra train on entire trip, as indicated by the engine number of the lead unit leaving Chico and are authorized to operate as an extra train between Chico and Stirling City without obtaining a clearance at Chico.

Extra trains originating Yuba City and operating between Yuba City and Tudor will display the engine number of lead unit leaving Yuba City, and are authorized to operate as an extra train between

Yuba City and Tudor without obtaining a clearance.

Extra trains operating on Yuba City Branch between Yuba City and Tudor, in addition to information required by train register located at Yuba City, must register destination of trip (turning point) and date of departure in the column captioned "Signals." When trip has been completed, date of arrival at Yuba City must also be entered in column captioned "Signals." Extra trains enroute to this territory must not leave Yuba City until it has been ascertained from train register that the preceding extra train via the route to be used has completed the trip and registered time and date

of arrival at Yuba City accordingly.

Extra trains operating on the Stirling City Branch between Chico and Stirling City, in addition to information required by train register located at Chico, must register destination of trip (turning point) and date of departure in the column captioned "Signals." When trip has been completed, date of arrival at Chico must also be entered in column captioned "Signals." Extra trains enroute to this territory must not leave Chico until it has been ascertained from train register that the preceding extra train via the route to be used has completed the trip and registered time and date of arrival at

Chico accordingly.

RULE 83-A. At the following stations, only the trains indicated will register:

Roseville - All trains except extra trains consisting entirely of passenger equipment and not terminating at Roseville. Yuba City-Trains originating or terminating. Chico-Trains originating or terminating.

Yard limits in which the provisions of Rule 93 will **RULE 93.** apply except within CTC limits, are established at the following stations:

West M	East MP	
98.04	Roseville (Eastward and No. 2 Track)	110.87
98.04	Roseville (No. 1 and Westward Track)	110.87
-139.80	Marysville (Dantoni Branch)	End of Branch
∿143.78	Marysville (Yuba City Branch)	148.42
143.78	Villa Verona (Oroville Branch)	End of Branch
183.48	Chico (Stirling City Branch)	189.00

Roseville: For train and engine movements Roseville yard, see Roseville Subdivision Rule 93.

RULE 98. Railroad crossings at grade not interlocked:

Lead from yard to East Valley Subdivision main track crosses No. 2 Track and No. 1 Track of Roseville Subdivision near passenger station. Eastward freight trains from yard to East Valley Subdivision will be governed by Signal 1062 and westward freight trains from East Valley Subdivision to enter yard will be governed by bottom unit of Signal 1063 before fouling or moving over No. 2 Track and No. 1 Track. Yuba City: SNRy at B

SNRy at Bridge St., and at B St. - Stop within 200

feet of crossings.

MP 186.60 on Stirling City Branch: SNRy crossing-Stop

within 200 feet of crossing.
Stop signs with red reflective background have been placed at the following railroad grade crossings:

Bridge Street - Yuba City, B Street-Yuba City, MP 186.60-Stirling City Branch.

Flag protection to rear of train is not required when rear of train is standing between westward absolute signal at MP 108.16 and eastward absolute signal at MP 106.65 East Valley Subdivision.

RULE 103-A. Trains and engines must stop and be preceded by flag-man before crossing highways and streets at:

Clayton.....Spur. Marysville.....14th and E Street crossings.

When westward absolute signal at east end Chico siding displays stop indication, trains must stop east of 8th St. crossing to avoid blocking fire route.

RULE 104. The normal position of rigid switches at junctions:

Dantoni Jct. ... Dantoni Branch, for Roseville line, ChicoStirling City Branch, for Stirling City Branch.

Berg.....Yuba City Branch Junction Switch,
for controlled siding.

Trains to or from East Valley Subdivision with the same conductor and engineer operating through Tehama may be issued train orders on East Valley Subdivision or West Valley Subdivision that affect their movement on either of these subdivisions.

RULES 283 and 288. Berg: Coupled-in-motion track scale at MP 145.47. Westward trains entering siding east end Berg may receive lunar light when absolute signal displays aspect per Rule 283, Fig. D or Rule 288, Fig. C., indicating train is to be weighed. Train to be moved through siding to east switch of scale track and lined through scale track. Speed of train when weighing must not exceed 4 MPH. A white speed indicator light located west of scale house is bidirectional, displaying indication both eastward and westward. Light is so set as to give a continuous white aspect for speeds under 4 MPH and will give a flashing white aspect for speeds in excess of 4 MPH. Movement of train over scale should be at a continuous speed of 4 MPH without slack action or stopping. While weighing a train a reverse movement must not be made. If indicator light on east side of scale house displays white light train may be weighed. If blue light displayed, crew member must push button located next to light; if indicator changes to white, train may be weighed. If it remains blue, train dispatcher must be contacted for instructions. After train is weighed and before removing tape, member of crew must observe indicator lights. If white light is displayed, power has not been interrupted while train being weighed. If blue light displayed, train dispatcher must be contacted and train reweighed.

RULE 289. Eastward absolute signal governing movement from Yuba City Branch equipped with lunar unit and may display aspect per Rule 289, Fig. C.

RULE 292. Flashing white light may be displayed in special signal located 300 feet east of Signal 1063. When flashing white light is displayed, westward trains and engines from East Valley Subdivision may enter Roseville yard, but must not pass Signal 1063 without proceed signal from switchman; yellow flag by day, yellow light by night. Westward trains and engines must not pass red aspect of switch point indicator adjacent to Signal 1063 unless oral authority received from switchman.

RULE 306. The following block signals, equipped with triangular plate displaying the letter "P," have included in their control limits some special protective device. Absolute signals are listed as "P-A."

Eastwa	rd Protection Westwar
P-A	Collision detector, highway underpass, MP 108.22 P-109
P-A	High water detector, bridge No. 135.00P-135
P-A	Spring switch west end siding Marysville
	Spring switch, east leg wye, Binney JctP-A
	Spring switch Yuba City Branch Jct. SwitchP-A
P-1906	High water detector, bridge No. 191.83P-A

SPECIAL INSTRUCTIONS—EAST VALLEY SUBDIVISION

RULE 535. SPRING SWITCHES

Spring switches equipped with facing point locks are located as follows:

Location Normal Position Marysville......West end sidingMain Track

Spring switches not equipped with facing point locks are located as follows:

Location Normal Position

Stirling City.....50 feet west of balloon track switchFor eastward movement

Main track switch 50 feet east of spring derail at Stirling City must be left lined and locked for movement into balloon track.

RULE 705. LETTER TYPE INDICATORS

Indicators located as follows:

Illum. Letter	On Signal	Approaching	Authorizes and requires
s	P-A	Marysville(West switch Marysville	Enter siding
S	A	Signal west end	Enter Yuba City Branch
S	P-A	Binney Jct. east leg wy	eEnter east leg of wye

RULE 705. HOT BOX DETECTORS

Illum.	On Signal	Approaching	Location of Readout
н	Eastward Absolute Signal E.E.		
	Ostrum	Ostrum	Westward Absolute
			Signal W.E. Ostrum
W	1356	Rupert	
		Dantoni Jct.	
W	1377	Ostrum	
		Dantoni Jct	MP 139.8
			Dantoni Jct.
Н	1601	Gridley	MP 158.15 Gridley
w	1628	Riceton	
		Richvale	Eastward Absolute Signal E.E. Richvale
W	1659	Riceton	
W	2044	Los Molinos	
H	2045	Vina	Westward Absolute Signal W.E. Vina
W	2071	Vina	
		Los Molinos	MP 209.8 Los Molinos

Scanner Site

MP	Direction	Location
116.0Wes	stward	Lincoln
	t and West	
163.9Eas	t and West	Riceton
206.3Eas	t and West	Vina-Los Molinos
Refer to Rule	e 705 All Subdivisions.	

CENTRALIZED TRAFFIC CONTROL

Limits extend from eastward absolute signal, MP 106.65 Roseville to westward absolute signal at end of double track Tehama, MP 211.88.

To enter East Valley main track from east leg of wye, Roseville,

at hand operated switch, permission for the movement must first be obtained from the train dispatcher, then line switch and be governed by indication of Signal 1068 and instructions from train dispatcher.

Binney Jct.: Movements across WPRR, MP 141.8 and movements onto east leg of wye are under control of SP train dispatcher. When absolute signals governing movements over crossing display

"Stop" indication; member of crew must contact train dispatcher for instructions. If signal cannot be cleared, after ascertaining from indications on control machine that there is no train approaching from either direction on WPRR, train dispatcher may authorize member of crew to operate "Push Button Time Release" in accordance with instructions posted in box marked "SP" near crossing.

Westward absolute signal located at east leg of wye is a three unit signal. Top unit governs movements on main track; middle unit to clearance point east end Marysville siding; bottom unit to east leg

of wye.

Eastward absolute signal located on signal bridge at east end of Marysville siding governing movement from siding is a three unit signal. Top unit governs movements to end of CTC, former Oroville Branch; middle unit through crossover to main track; bottom unit through crossover to west leg of wye.

Operating instructions for push button time release: Press button until amber light is illuminated, then release. After time release interval red light should be illuminated, indicating time release has functioned and intersecting route is clear of conflicting train movements.

If absolute signal does not then indicate proceed after time re-lease actuated but red light is illuminated in push button box, train

may proceed over intersecting railroad crossing under provisions of Rule 776 without providing flag protection on intersecting route.

If absolute signal does not display proceed indication and red light is not illuminated in push button box after time release actually a signal does not apply the following actual to the push of ated, train may proceed only as provided by Rule 663(c) and Rule

Time release intervals:

Binney Junction - 5 minutes, 8 sec.

RULE 776. When an eastward train is standing on main track west of spring switch MP 140.7 (west end Marysville siding), engines with or without cars may pass westward absolute signal MP 140.7 governing movement over spring switch displaying stop indication at restricted speed without stopping and without obtaining permission from train dispatcher to couple engines or cars to such train. Spring switch must be hand thrown for such movements.

GENERAL REGULATIONS

RULE 825. Portable rail skid is hung on post at the west end of house track at Paradise.

See Rule 825 All Sub-Divisions.

RULE 827. Dragging equipment detector located at MP 149.0 Berg. See Rule 827 all Sub-Divisions.

AIR BRAKE RULES

FREIGHT AND MIXED TRAINS

Retaining valves must be used on descending **RULE 17.** grades as follows:

Stirling City to Butte Creek

WITHOUT DYNAMIC BRAKE IN OPERATION: One retaining valve for each 80 tons in train and speed must not exceed 15 MPH.

WITH DYNAMIC BRAKE IN OPERATION:

Permissible Tons Per Unit Without Retaining Valves* Basic-Dynamic

Extended Range

	Brake		Dynamic Bra		ake	
	4 Axle	6 Axle	4 Axle	6 Axle	8 Axle	
With dynamic brake in operation but without pressure maintaining system of braking With dynamic brake in operation and with pressure maintaining system of braking	325 700	475 1050	350 800	550 1200	725 1600	

If permissible tonnage is exceeded one retaining valve must be used for each 150 tons in excess thereof.

Locomotive classes AF 628, AF 630, EF 425, EF 623, EF 625, EF 630, EF 636, GF 425 (except units 6700-6727), GF 628, GF 630,

SPECIAL INSTRUCTIONS — EAST VALLEY SUBDIVISION

GF 633, EF 850B and GF 850 are equipped with extended range dynamic brake.

*If any unit having basic dynamic brake is operated with units having extended range dynamic brake, all units in consist must use tonnage authorized for units having basic dynamic brake.

RULE 25. Will apply to westward trains at Stirling City.

RULE 33. Stirling City to Butte Creek. Maximum tons per operative brake-80 tons.

Restrictive grades are as follows:

MP to MP Speed-MPH Westward......215.46-188.75......15

MISCELLANEOUS

Crossover diverging from former Oroville Branch at MP 122.94 to WPRR at WPRR MP 180.42.

Hand operated switch installed at west end crossover is normally positioned for former Oroville Branch. Hand operated switch at east end crossover, normally positioned for WPRR main track, is equipped with electric lock and protected by separate hand operated derail located approximately 110 feet west of WPRR main track.

Instructions for operation electric lock located in phone box adjacent to WPRR main track.

adjacent to WPRR main track switch. Electric lock switch must be operated before derail, otherwise electric lock will not release. WP

operating Rule 550 applies.

Eastward SP trains and engines must contact WP train dispatcher to obtain permiss on to operate electric lock and instructions to move Marysville to Oroville.

Westward SP trains and engines must contact WP train dis-patcher for instructions to move Oroville to Marysville.

These movements governed by WPRR rules, timetable, bulle-

tins and Special Instructions.

SNRY trains will operate on SP tracks between MP 152.20,
Live Oak, and MP 178.2, Durham, being governed by SP rules,
timetable special instructions and timetable bulletins.

Hand operated switch equipped with electric lock located at SN track connection to SP main track at MP 152.20, Live Oak. Eastward SN trains and engines must contact SP train dispatcher for permission to operate electric lock. Instructions for operation of electric lock located in phone box adjacent to switch. SN trains will be governed by eastward automatic signal 1522 which may display aspects per Rules 285, Fig. D, and 290, Fig. E.

Hand operated switch to SN spur at MP 152.21 is equipped with electric lock. SN trains and engines must contact SP train dispatcher for permission to operate electric lock. Signal 1523 will govern movement from SN spur to SP main track and may display aspects per Rules 285, Fig. D, and 290, Fig. E.

Hand operated switch equipped with electric lock located at SN track connection to SP main track at MP 178.2, Durham. Westward SN trains and engines must contact SP train dispatcher for permission to operate electric lock. Sign reading DO NOT FOUL MAIN TRACK WITHOUT DISPATCHER'S PERMISSION is located on SN connection to SP main track.

MISCELLANEOUS

Engines listed must not operate on tracks shown below:

Class of Engine

Restricted Tracks

All engines.......Chico-Diamond National Co. track off east leg of

Load limit (car and contents):

Roseville-Tehama	315.000	pounds
Chico-Stirling City	240,000	pounds
Berg-Wilson	240,000	pounds
Dantoni JctDantoni	240,000	pounds
Oroville-Ville Verona	240,000	pounds
Binney JctOroville (WPRR)	263,000	pounds

Unless authorized by Superintendent, heavier loads must not be handled.

30.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

MP	Location	Description		
210.82	Tehama	Sacramento	River	BridgeOverhead

SPECIAL INSTRUCTIONS—EAST VALLEY SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in SPEED RESTRICTIONS FOR ENGINES appearing on pages 6 and 7, and MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT and OTHER MAXIMUM SPEEDS appearing on page 7 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE SAFETY,

REGARDLESS OF TIME.

	TERRITORY		PASSEN- GER TRAINS	FREIGHT AND MIXED				
MP	МР	Column:	1	2				
EASTWA	ARD, ROSEVILI	LE TO			WESTWARD, TEHAMA TO			
TEHA					ROSEVILLE:			
106.61 (1	.06.57) to 106.85		15	15	211.88 to 210.82	25	25	
106.85 to	116.60		65	60	210.82 to 209.93	35	35	
116.60 to	117.17		55	55	209.93 to 184.50	70	60	
	117.43		50	50	★184.50 to 183.80	25	25	
	123.10		60	60	183.80 to 143.88	70	60	
	139.05		65	60				-
	139.80		50.	50				
	141.95		25	25	143.88 to 142.00	50	45	
	142.00		45	45	142.00 to 141.95	45	45	
	143.88		50	45	141.95 to 139.80	25	25	
112.00 00					139.80 to 123.10	65	60	
				THE THIN I DIG	123.10 to 117.43	60	60	
149 99 to	183.80		70	60	117.43 to 117.17	50	50	
	184.50		25	25	117.17 to 116.60.	55	55	
	209.93		70	60	116.60 to 106.85	65	60	
	210.82		35	35	106.85 to 106.61 (106.57)	15	15	
	211.84 (junction		25	25	100.85 to 100.01 (100.57)	110	10	
210.02 0	211.04 Junetion	i switch)	20	20				
					WESTWARD, STIRLING CITY TO			
E A CVENTY A	ADD CITICO TO	,			CHICO:			
EASTWA	ARD, CHICO TO	,			215.46 to 188.75		15	
STIRL	ING CITY:			15	188.75 to 185.38		20	
184.38 to	185.38		***	20	185.38 to 184.38		15	
	188.75		***					
188.75 to	215.46			15				
					WESTWARD, DANTONI TO DANTONI JCT			
EASTWA	ARD, DANTONI	JCT. TO			DANTONI JCT.		20	
DANT	ONI			20				
2								
					WESTWARD, OROVILLE TO			
	ARD, MARYSVI				MARYSVILLE VIA WPRR:			
	ILLE VIA WPR			300	205.00 to 178.00 (WPRR)		#	
178.00 to	205.00 (WPRR).			#				
EASTWA	ARD, BERG TO	WILSON:			WESTWARD, WILSON TO BERG:			
	150.00			15	159.01 to 150.00		35	
	159.01			35	150.00 to 144.43		15	

★When engine passes last crossing within limits of restriction in direction of movement, speed may be resumed to that shown on

next speed sign.

#Speed on WPRR tracks governed by WPRR rules, timetable, special instructions and timetable bulletins.

RULE 10-J. Passenger trains may operate at speed shown in Column 1 in territory where such speed is in excess of that authorized

Limits within which trains are specifically authorized to operate at Column 1 speed not exceeding 65 MPH under the conditions specified in All Sub-Divisions, Page 8, Miscellaneous, Item No. 28: MP 106.85 and MP 209.90.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other tracks, wyes, balloon	1
tracks, crossovers and turnouts, except:	. 15
Through sidings at Whitney, Brock, Ostrom, Berg	,
Fagan, Richvale, Chico, Anita and Vina	. 25
Binney Jct. Through east leg of wye and interchange track connection to WPRR)
track connection to WPRR	10
Oroville. Through interchange from WPRR to SP	. 10
Through turnouts on other than sidings	. 10
On branches	

RULES 7-A, 10-G and 10-H. Yellow signals and unattended red flags, red lights and green "Resume Speed" flags will be placed to the left of track between Mile Posts:

195.3 and 246.2

Mile post locations above are those shown for No. 2 Track.

RULE 10-1. Yellow "Proceed Prepared to Stop" signs and red "Conditional Stop" signs and green "Resume Speed" flags for westward movement on No. 2 track and for eastward movement on No. 1 track will be displayed to the right of the track between MP 195.3 and MP 208.0.

Yellow "Proceed Prepared to Stop" signs and red "Conditional Stop" signs and green "Resume Speed" flags for eastward movement on No. 2 track and westward movement on No. 1 track will be displayed to the left of track between MP 195.3 and MP 208.0.

RULE 10-J. Speed signs to right of track in current of traffic direction with one track intervening:

Westward at MP 91.15 reading 10. Eastward at MP 106.88 reading 35.

Eastward at MP 132.10 (Brighton) reading 40.

Speed signs to left of track with one track intervening:

Westward at MP 245.20 reading 20.

Westward speed sign at MP 245.20 is 1.10 miles instead of 2 miles from point of restriction.

Westward speed sign at MP 94.90 is 2.34 instead of 2 miles from

point of restriction.

Speed signs on No. 1 Track and on No. 2 Track between MP 111.00 and MP 133.00 are to the right of track for current of traffic movement.

Eastward speed sign at MP 140.30 is located 1.10 miles instead of three-fourth mile from point of restriction.

Westward trains will sound crossing whistle signal immediately after emerging from west portal of Tunnels Nos. 6 and 41, west of Eder.

RULE 26. Roseville: Blue signs reading "Men at Work" permanently installed on base of indicator lights at each end of car repair facility Tracks Nos. 1, 2 and 3. When indicator lights display blue aspect, these tracks must not be entered nor cars or cut of cars moved or coupled to nor other equipment placed so as to obstruct the view of signs or lights. When indicator lights display yellow aspect, blue sign reading "Men at Work" will not apply to these tracks.

Absence of both blue and yellow aspect in these indicators must

be considered as displaying most restrictive indication and blue

signs respected in accordance with this rule.

Conductor reporting for duty on outbound trains will instruct crews to immediately proceed to make-up track and be governed by the following:

Crews may release all hand brakes on their train except 7 on west end and 3 on east end on north and eastbound trains, and release all hand brakes on their trains except 7 on west end of all westbound trains. The 7 hand brakes on west end and 3 hand brakes on east end of north and eastbound trains and the 7 hand brakes on west end of westbound trains must not be released until blue flag has been removed.

All outbound trains made up on ice deck tracks 71, 72, 73 or 74 will not release hand brakes until signal on track where train is

made up displays green aspect.

RULE 26-A. Roseville: Indicator lights located on Tracks Nos. 71 and 72 at each end of PFE Icing platform No. 1 and pole between Tracks Nos. 71 and 72, 1324 feet east of PFE Icing platform No. 1 and on Tracks Nos. 73 and 74 at west end PFE Icing platform No. 2 and pole between Tracks Nos. 73 and 74, 412 feet east of PFE Icing platform No. 2 govern movements on those tracks as follows:

Green: Yellow:

Tracks may be used for train or switching movements. Tracks may be entered, switched, and engines, cars or cabooses added or detached.

Red:

Tracks may be entered but cars on tracks must not be coupled to or moved. Trains made up on these tracks must not depart until it has been ascertained indicator displays green aspect.

Not Lighted: Must be considered as displaying most restrictive indication and icing platform foreman must be contacted for instructions before cars are coupled to or moved.

RULE 81. Sacramento. Before entering main track at 7th Street or 15th Street, trains and engines except yard engines must receive proceed signal from switchman at location entry is made or movement orally authorized by yardmaster or his representative.

Trains to San Joaquin Division at Polk, originat-RULE 82-A. ing at Sacramento or Roseville, must obtain two clearances, one endorsed Sacramento Division, the other endorsed San Joaquin Division. Train orders addressed to such trains at Sacramento and Roseville will apply the same as if addressed to them at Polk.

First class trains to or from San Joaquin Division at Polk will assume the corresponding number and schedule at Polk without

Trains to Western Division at Sacramento, originating at Rose-ville, must obtain two clearances, one endorsed Sacramento Division, the other endorsed Western Division. Train orders addressed to such trains at Roseville will apply the same as if addressed to them at Sacramento and may leave Sacramento without clearance.

Extra trains, except trains of passenger equipment, from West-ern Division passing Sacramento will not obtain clearance at

Sacramento.

Train order office Roseville is located at yard office. Sacramento Northern trains originating at Sacramento, 19th and B Sts., or Sacramento-Yolo Port District connection to Western Division must obtain clearance at Sacramento. Train order office Sacramento is located in passenger station.

RULE 83-A. At the following stations, only the trains indicated will register:

Sacramento-Trains originating or terminating, except Extra trains passing Sacramento to or from Western Division. Sacramento Northern trains to Western Division will register at

Sacramento train order office.

Roseville - All trains except first-class trains, extra trains consisting entirely of passenger equipment and not terminating at Roseville.

Truckee—Trains originating or terminating. Norden—Work extras originating or terminating. Colfax-Trains originating or terminating.

Yard limits in which the provisions of Rule 93 will apply, except within CTC limits, are established at the following stations:

West M	P East MP
85.51	Sacramento
	" (Walnut Grove Branch) 93.09
	" (Placerville Branch) 97.00
131.60	" (Stockton line)
103.80	Citrus
100.00	" (Fair Oaks line) End of Branch
110 57	
110.57	" (Placerville Branch)
148.19	Placerville End of Branch
110.64	Walnut Grove
98.04	Roseville (Eastward and No. 2 Track)
98.04	" (No. 1 and Westward Track)
119.34	Newcastle (No. 2 Track)
118.74	" (No. 1 Track)
122.66	Auburn
140.03	Colfax
169.11	Emigrant Gap
207.28	Truckee
237.49	Sparks

Yard limit signs located to left of track: Approaching Truckee in both directions.

Sacramento Northern trains preparing to enter Sacramento: SP tracks at 19th & B, or 22nd & B Sts., must stop clear of fouling point, or derail if any, and member of crew must contact SP yardmaster for permission to enter SP tracks. Before switch is lined it must be known by observation that there is no movement closely approaching track to be occupied.

CCT trains preparing to enter SP tracks at Sacramento or Polk must stop clear of fouling point or derail, if any. Member of crew

SPECIAL INSTRUCTIONS - ROSEVILLE SUBDIVISION

must contact SP operator at Elvas for permission to enter SP tracks at Polk. To enter SP tracks at 22nd St., crew member must contact SP yardmaster. Before switch is lined it must be known by observation that there is no movement closely approaching track to be occupied. When CCT clear SP tracks at 22nd St. member of crew must advise SP yardmaster.

Antelope: Switchman's proceed signal, green and white flag by day, green and white light by night, will be an indication that protection has been provided for movement against current of traffic within yard limits on eastward main track.

Roseville: End of double track at MP 103.14 Antelope, and at MP 106.16 Roseville. Single track between MP 103.14 and MP 106.16 is within interlocking limits.

Roseville: Flashing white light installed west of electrically operated switch on Tracks 21-25. Eastward movements, except yard engines, must not be made from Track 21 unless switch is lined and flashing white light is displayed or movement is orally authorized.

Westward freight trains and engines from Roseville Subdivision, after receiving proceed signal or oral authorization from switchman, may pass Signal 1065 displaying stop indication without stopping when movement to be made into yard tracks.

Westward freight trains and engines, except yard engines, or trains consisting entirely of passenger equipment, when making continuous movement on main track must not pass Signal 1065 unless proceed signal or oral authorization received from switchman. Westward freight trains and engines from Roseville Subdivision

must stop clear of Berry St. crossing, MP 107.20 unless flashing yellow light is displayed in special signal just west of Berry St.

Westward trains and engines (except yard engines) using running track must not pass fouling point at west end in vicinity of Dry Creek unless proceed signal received from switchman, yellow flag by day, yellow light by night, or oral authorization or signal received from trainman of the same crew.

Eastward trains entering yard track must not pass Antelope train order office unless proceed signal or oral authorization received

from switchman.

Westward trains and engines (except yard engines) using running track at Antelope must not pass fouling point unless proceed signal received from switchman, green flag by day, green light by night, or oral authorization or signal received from trainman of the same crew.

Eastward trains leaving via drill track must not pass Signal 1072 displaying stop indication without contacting switchman orally.

Eastward freight trains leaving via No. 2 Track must not pass Signal 1074 displaying stop indication without contacting switch-

Movement of trains in both directions between eastward Signals 1060 and 1064 and westward Signals 1065 and 1067 on Roseville Subdivision and between eastward Signals 1062 and 1064 and westward Signal 1063 on East Valley Subdivision will be governed by signal indication which will supersede the superiority of trains, but movements must be made with caution, and only after block signal indicating proceed is displayed as prescribed below.

For eastward movement on No. 1 Track, top unit on Signal 1064 governs movement to No. 1 Track; bottom unit governs movement to East Valley Subdivision.

Eastward movement on No. 2 Track is governed by Signal

1060 For westward movement on No. 1 Track; top unit on Signal 1065 governs movement to No. 1 Track; bottom unit governs move-

ment through crossover to No. 2 Track.

For westward movement on East Valley Subdivision, top unit

on Signal 1063 governs movement to junction switch leading to No. 1 Track; bottom unit governs movement across No. 1 Track and No. 2 Track of Roseville Subdivision to yard tracks. Signal 1062 on east drill track governs movement to East

Valley Subdivision only.

Trains stopped by Signals 1060, 1062, 1063, 1064, 1065 or 1067 must not proceed until signal displays proceed indication, except may proceed after stopping if proceed signal or oral authorization received from switchman, movement to be made with caution.

DIESEL SERVICING FACILITIES:

Eastward movements into inbound receiving tracks of Roseville diesel servicing facilities from interlocking limits MP 105.37 are governed by indicator light located on mast 500 feet east of power derail at MP 105.37.

Eastward movement must not be made past this mast unless flashing white light is displayed or movement is orally authorized by yardmaster or his representative. Westward movement must not be made over power operated switches on inbound lead unless move-ment is orally authorized by yardmaster or his representative.

Tracks 3 to 5 inclusive are equipped with electro-pneumatic controlled switches and switch point indicators. Indicators do not indicate track occupancy, but will display green aspect when switch is in normal position and yellow aspect when switch is in reverse position. When indicator light is not lighted, careful examination of switch must be made before making movement over switch.

Service Lead from Subway to oil, sandhouse and diesel facilities has stop sign located at fouling point of inbound lead to receiving tracks. After stopping it will be permissible to proceed if route

is clear.

Switch position indicator located at:

Roseville Jennings Unit, switch in westward running

Indicator does not indicate track occupancy but when displaying red, yellow or green aspects following will govern:

Red aspect Inoperative.

Yellow aspect. . . Switch lined for yard receiving unit. Green aspect . . . Switch lined for running track Antelope.

Stop signs with reflective background are located on eastward yard running Track No. 21 between Antelope and Roseville. Instructions governing movement past each sign as follows:

West of Dry Creek Subway: STOP UNLESS PROCEED SIGNAL RECEIVED FROM SWITCHMAN OR ORALLY AUTHORIZED BY YARDMASTER OR HIS REPRESENTATIVE.

East end Track No. 21: STOP UNLESS PROCEED SIGNAL RECEIVED FROM SWITCHMAN OR ORALLY AUTHORIZED BY YARDMASTER OR HIS REPRESENTATIVE.

These signals will not be considered a red signal as prescribed by Rule 10-G. Yard engines accompanied by yard crews may pass these signals without stopping.

Hump Movements-Jennings Unit:

Light signals which govern hump movements at Jennings Unit located as follows:

South Hump At crest to right of track. North Hump At crest to left of track.

Light signals which repeat the aspect of hump signals located

South Hump To left of south lead track, west of manual crossover.

North Hump To left of north lead track, west of manual crossover.

When crossovers west of crest are lined normal, the south hump repeater will repeat the aspect of the south hump signal, and the north hump repeater will repeat the aspect of the north hump signal.

When crossover west of crest is lined for movement from south receiving tracks to north hump, the south hump repeater signal will repeat the aspect of the north hump signal.

When crossover of crest is lined for movement from north rewhen crossover of crest is fined for movement from north re-ceiving tracks to south hump, the north hump repeater signal will repeat the south hump signal.

These light signals do not indicate track occupancy or position of switches, but when displaying red, flashing red, yellow or green

aspect, following will govern:

Aspect Indication Stop Back Proceed at normal hump speed

Green Proceed For eastward movement of cars from receiving yard to crest,

hump and repeater signals must display yellow or green aspect and in addition engineer instructed to move either orally or by hand or lamp signals by yardmaster or his representative in charge of movement.

Movement of cars toward crest of hump must not be made past repeater signal displaying red aspect unless engineer is orally in-

formed by yardmaster or his representative that protection has been provided to safeguard the movement. Yardmaster before authorizing such a movement must know that crossovers west of crest are properly lined for such a movement and that humping movements from opposite hump through diamond crossover east of crest are stopped.

Light signals which govern trim movements from bowl at Jen-

nings Unit are located as follows:

South Hump At crest to left of track. North Hump At crest to right of track.

Light signals which repeat the aspect of the trim signals are located as follows:

South Hump No. 1 repeater to left of track near 22-49 Switch Tower A-B.

No. 2 repeater between leads at 36-42 and 43-46 Switches.

North Hump No. 1 repeater to right of track

near Switch 1-21. No. 2 repeater to right of track near Switch 1-7.

These light signals do not indicate track occupancy or position of switches but when displaying red or yellow aspect, following will govern:

Aspect Indication Red. Stop Yellow.... Proceed

For westward movement from bowl tracks to crest, trim and repeater signals must display a yellow aspect, and in addition engineer instructed to move either orally or by hand or lamp signals by switchman in charge of movement. Movement must not be made west of fouling point of bowl tracks when trim and repeater signals display red aspect unless engineer is orally informed by yardmaster or his representative that movement is protected. Yardmaster authorizing such movement must insure that any conflicting movements are stopped.

Switch point indicators are provided on all power operated switches at west end of bowl at Jennings Unit. Westward movement must not be made to foul lead or any track diverging from lead un-

less switch is seen to be lined for the movement.

Tracks 23, 24 and 25 equipped with electrically controlled switches and switch point indicators. Indicators do not indicate track occupancy, but will display green aspect when switch is in normal position and yellow aspect when switch is in reverse position. When indicator lamp is not lighted, switch points must be checked to determine proper position before making movement over switch.

Trains or engines, except yard engines, must not enter tracks 23, 24 or 25 unless a proceed signal is received, green flag by day, green light by night, or engineer is orally authorized. When proceed signal received, or orally authorized, train or engine may proceed

into track lined for movement.

Eastward movements from tracks 23, 24 and 25 are governed by indicator light located adjacent to No. 23 track switch.

Eastward movements, except yard engines, must not be made from tracks 23, 24 or 25 unless switches are lined and flashing white light is displayed or movement is orally authorized.

Westward movements, except yard engines, must not be made from tracks 23, 24 or 25 unless proceed signal received, green flag

by day, green light by night or orally authorized.

Flashing white light located west of electrically operated switch on Tracks 21-25. Eastward movements, except yard engines, must not be made from Track 21 unless switch is lined and flashing white light is displayed or movement is orally authorized.

RULE D-97. Applies between Oakland (16th St.) and Sparks.

RULE 98. Railroad crossings at grade not interlocked:

Sacramento: WPRR at Front and R Sts.-Trains and engines must approach with caution expecting to find crossing occupied. Switching and industry tracks in vicinity of Front and R Sts. -

Ascertain that each crossing is clear before using.

SNRy at Front and R Sts.—Stop within 200 feet of crossing.

SNRy at Alhambra Blvd. and R Street—Stop before crossing.

Stop signs with reflective background have been placed at the following railroad grade crossings:

Front and R Streets. Alhambra Blvd. and R Street SNRy.

Roseville: Lead from yard to East Valley Subdivision main track crosses No. 2 Track and No. 1 Track of Roseville Subdivision near passenger station. Eastward freight trains from yard to East Valley Subdivision will be governed by Signal 1062, and westward freight trains from East Valley Subdivision to enter yard will be governed by bottom unit of Signal 1063 before fouling or moving over No. 2 Track and No. 1 Track.

RULE 99-C. Will apply on Placerville and Walnut Grove Branches.

RULE 103-A. Trains and engines must stop and be preceded by flagman before crossing highways at:

Sacramento: Spur track No. 130 crossing 23rd Street. Isleton, on wharf spur.

Cantilever flashing light signals in service at Walnut Grove Branch and Capitol Avenue crossing at Sacramento: Light type indicators located adjacent to crossing govern movement of trains and engines over Capitol Avenue. Green aspect indicates crossing gates and flashers have been actuated and movement may be made

with caution. Red or dark aspect indicates stop.

Antelope: Crossing gate key control installed at "U" Street to actuate gates when backup movements made from westward main

Eastward trains stopping at Roseville within 400 feet of Yosemite Street crossing, when starting must not exceed 10 MPH until engine

enters crossing.
Westward trains stopping at Truckee must stop with engine east of Signal 2083 to avoid unnecessary operation of automatic warning device at Bridge Street.

RULE 104. The normal position of rigid switches at junctions: Citrus - Fair Oaks Branch, for Placerville Branch Folsom Junction - Folsom Branch, for Placerville Branch.

Roseville: Westward trains must not pass RULE 107. Yosemite Street when eastward passenger train is doing work at the station, unless proceed signal received from yardmaster or his representative, green flag by day, green light by night.

RULE 221. Train-order office at Roseville is located at yard office. First class trains and trains consisting entirely of passenger equipment not terminating at Roseville are not required to obtain a clearance at Roseville.

Norden: Train order signal located to the right of No. 2 track will

apply to eastbound trains on No. 2 track only.

Train order signal installed to the left of No. 1 track will apply to eastbound trains on No. 1 track only.

RULE D-251. Applies to the following tracks: Both tracks between Oakland (16th St.) (Western Division)

Eastward trains leaving Roseville, except first class, must not

leave unless proceed signal (green flag by day, green light by night) or oral authority received from switchman. Will not apply to eastward extra trains consisting exclusively of passenger equipment on continuous main track movement through Roseville.

RULE 292. Westward trains and engines must not pass red aspect of switch point indicator adjacent to Signal 1063 unless oral authority received from switchman.

RULE 306. The following block signals, equipped with triangular plate displaying the letter "P," have included in their control limits some special protective device. Interlocking signals are listed

Eastwar Signal	Protection W	Westward Signal		
	*Spring switch, Sacto-Yolo Port Dist. conn Spring switch, end double track,			
	MP 103.14, Antelope	P-I		
P-994	Collision Barricade Detector, MP 99.9	P-1009		
P-1228	Slide Detector Fence, Tunnel 20, MP 123.15 to 123.39			
	Collision Barricade Detector, MP 124.7	P-1251		
P-1242	Collision detector, highway underpass, MP 125.53	1-1201		
	Collision detector, highway underpass,			
	MP 133.35	P-1347		
P-1374	Collision detector, highway underpass, MP 137.68	1-1047		
P-1438	Slide Detector Fence, MP 144.46 to 144.66			
P-1508	Slide Detector Fence, MP 150.83	P-1515		
P-1556	Slide Detector Fence, MP 156.32 to MP 156.38.	P-1565		
P-1582	Slide Detector Fence, MP 159.43 to	P-1599		
	MP 159.46			
P-I	Slide Detector Fence, MP 195.60 to	1-1001		
	MP 195.70, No. 1 Track	P-1963		
P-2220	Slide Detector Fence, MP 222.16 to MP 222.34	1-1300		
	Slide Detector Fences			
	MP 223.87 to MP 223.80			
	MP 223.87 to MP 223.80	P-9930		
	MP 222.34 to MP 222.16	1 -2200		
P-2240	MP 222.34 to MP 222.16	P-2250		

*If point indicator displays green aspect movement to Port District may proceed at restricted speed without hand throwing spring switch.

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM. Trains or engines making westward movement to Sacramento-Yolo Port District must stop at westward signal 889, 2nd & H Sts. and contact interlocking operator, Sacramento River Drawbridge for permission to move against current of traffic to Sacramento-Yolo Port District.

Push button and pilot light are installed in box near signals 887 and 889 and near 7th St. herder shanty. Signal 887 or 889 may be cleared by operation of push button bearing number of signal from location near signal or from 7th St. herder shanty to allow bypass movement. Trains or engines encountering stop indication displayed by Signal 887 on westward freight lead must contact yard-master, Sacramento Tower, for instructions. Yardmaster's instructions do not relieve crew desiring to enter westward main track from compliance with Rule 513.

RULE D-506. Floriston: Light type indicator at MP 222.40 applies to No. 1 Track only, and indicates condition of slide detector fence only and is not connected with block signal circuit. Lunar light indicates track at slide detector fence safe for trains; red aspect requires that inspection must be made of track protected by slide detector fence before train passes the fence.

Spring switches equipped with facing point locks are located

RULE 535. SPRING SWITCHES

Location	Normal Position
Antelope End of double track (MP 103.14)	Westward Track
Spring switches not equipped with facing poi as follows:	int locks are located
Location	Normal Position
*Sacramento Sacto-Yolo Port Conn	Sacto-Yolo

Location	Normal Position
*Sacramento Sacto-Yolo Port Conn	. Sacto-Yolo Port Dist.
*Sacramento Westward freight lead 2nd & H	track
*Roseville East and east drill track	No. 2 Track
Roseville East end Big Reno	. East drill track
*Gold Run East end eastward siding	No. 2 Track

^{*}Equipped with switch-point indicator.

RULE 605. INTERLOCKING

Sacramento River Drawbridge: Trains or engines encountering stop indication displayed by interlocking signal must contact operator for instructions and be governed by Rules 662 and 663. Telephones are located adjacent to interlocking signals and Signals 887 and 889.

Nineteenth Street, Sacramento: At crossing of R Street Track with WPRR.

Movements across WPRR main track are under control of WPRR train dispatcher located at Sacramento who will control signals which govern movement but do not indicate occupancy of track.

Signal at 19th Street will display proceed indication only when hand operated switches are lined for R Street line. When movements are to be made into Valley Grocery spur or Bekins spur, switches shall be lined for spur after entering interlocking limits. When signals governing movement over WPRR crossing display stop indication after approach circuit is occupied or if signals governing movement out of Valley Grocery spur or Bekins spur do not display proceed indication after switch has been lined, a member of crew must contact WPRR train dispatcher by telephone for instructions. Upon receiving permission from WPRR train dispatcher movement must be made under provisions of Rule 663.

Telephones located in telephone boxes at following locations: West leg of WPRR wye track and R Street.

Bekins spur signal, steel relay shelter just south of crossing.

Elvas: Limits extend on Sacramento-Roseville line from interlocking signal 1800 feet west of tower to interlocking signal 1370 feet east of tower, and on Elvas-Polk line to interlocking signal at west switch Polk; and on Placerville Branch to interlocking signal 600 feet east of junction switch.

Following switches are equipped with electric switch locks and electric switch locks must not be operated until permission has been obtained from operator whose instructions will govern movements not controlled by signal indicator:

Elvas	American Can Co. Spur.
Elvas	Crossover between center siding and westward track.
Elvas	Crossover from center siding to eastward track.
Elvas	West end of center siding.
Hopfen spur	Switch
R Street industr	ial
track	
Black Diamond	
Lumber Co	Switch.
Switches will no	t he lined for movement to Polk siding without

Switches will not be lined for movement to Polk siding without first obtaining permission from operator.

Georgiana Slough Drawbridge: At MP 119.53 on Walnut Grove Branch.

Roseville: Limits as follows:

On main tracks between MP 102.50 and MP 106.64.

Eastward signal at MP 102.50 governs movements as follows:

Top unit to Eastward Track.

Middle unit to receiving track through first switch,

Bottom unit to receiving track through second switch.

Eastward signal at MP 106.16 governs movement as follows:

Top unit to No. 2 Track, Bottom unit to No. 1 Track.

Telephones to operator are located at main track signals. Instructions for operation of dual control switch machines are posted in telephone booths.

Switch to Los Angeles By-Product spur, Antelope equipped with electric switch lock. Switch lock must not be operated until permission obtained from operator whose instructions will govern movements not controlled by signal indicator.

Norden: Limits extend on No. 1 Track and No. 2 Track from interlocking signals located on west end highway overpass, Emigrant Gap, MP 171.87, to westward interlocking signals located on signal bridge MP 207.64, west end Truckee.

Run-around track and Turntable Lead 3—Trains or engines must obtain permission from operator before lining switch to siding. Westward interlocking signal on No. 1 Track, 550 feet east of Norden station building connected with repeater signal on the left

side of track for better visibility.

Call-on signals on certain interlocking signal masts are normally dark, but when displaying flashing yellow light are authority to pass interlocking signal displaying stop indication without obtaining permission from operator to couple to train or engine; movement to be made at restricted speed.

Bottom unit of interlocking signals for movements on siding may display lunar aspect. When lunar aspect is displayed, train or engine may proceed without stopping at restricted speed. (Rule 289). Following switches equipped with electric switch locks:

Summit. Spur switch MP 193.4.

2. No. 1 Turntable Lead switch, No. 1 Track.

Lock box doors on electric switch locks must not be opened without permission of operator.

RULE 705. LETTER TYPE INDICATORS

Indicators located as follows:

Sacramento: Wait indicators located east and west end "R" Street overpass near Front Street.

 Eastward and westward trains must stop at "W" indicator.
 Operation of pushbutton will extinguish "W" indicator and flashing white light will authorize movement over structure to opposing "W" indicator.

3. After receiving flashing white light and movement over

structure is not made, cancel button is provided.

Should "W" indicator be found extinguished or flashing white light cannot be activated by operation of pushbutton, movements must be made with caution protecting against opposing trains.

*Pushbutton box located on case of "W" indicator. Advance pushbutton provided east of Third Street for westward movements to minimize blocking Third Street crossing.

EASTWARD

Illum. Letter	On Signal	Approaching	Authorizes and requires movement as follows:
S	1404	Colfax	Enter siding and contact train dispatcher.
W	1688	Emigrant Gap*	When letter W is illuminated, train must stop and not pro- ceed until indicator is ex- tinguished.

*When eastward train finds Signal 1688 displaying stop indication and W letter type indicator not illuminated, member of train crew must contact operator, Norden, before proceeding, and be governed by his instructions.

P7-ft. Mast

MP 241.69...Reno......Eastward trains and engines must stop west of Keystone Avenue, Reno, MP 242.11, unless indicator light unit

mounted on mast, MP 241.69, displays letter "P" or authority is obtained from the Yardmaster and his instructions followed.

WESTWARD

S	2091	Truckee	Enter westward siding and con-
~			tact operator, Norden.
W	2027	Andover*	
W	2029	Andover*	
W	2083	Truckee*	

*When letter W is illuminated, train must stop and not proceed until indicator is extinguished.

When westward train finds Signal 2029, Signal 2027 or Signal 2083 displaying stop indication and W letter type indicator not illuminated, member of train crew must contact operator Norden before proceeding, and be governed by his instructions.

RULE 705. HOT BOX DETECTORS

Illum. Letter	On Signal	Approaching	Location of Readout
Н	1421	Colfax	West End Colfax
w	1431	Colfax*	MP 141.55
Scanner MP	Site	Direction	Location
98.3		Eastward	Planehaven
110.2		Westward	Rocklin
143.5		Westward	Colfax-Cape Horn
240.0		Eastward	West Reno

Refer to Rule 705 All Subdivisions.

*When letter "W" is illuminated, train must stop. Member of train crew must contact train dispatcher before proceeding and be governed by his instructions.

GENERAL REGULATIONS

Not less than three hand brakes RULE 825. Sacramento: must be set on west end of cars or trains on Tracks 2 through 9, inc. Not less than two hand brakes must be set on east end of cars or trains on Tracks 14 through 27, inc.

Roseville: Not less than seven hand brakes must be set on cars or trains on the following tracks Roseville Terminal:

East End-Tracks 1 through 25, incl., Receiving Yard.

West End – Tracks 50 through 84, incl., Departure Yard. West End – Track 21, Departure Yard.

East End-All tracks in PFE repair yard, incl., Tracks 90 and

Portable rail skids are hung on posts at the following stations:

West end team track, Placerville,

West end of interchange tracks, Placerville, Lower end of sidings at Bowman, Midas, Emigrant Gap

Crossover Verdi.

See Rule 825 - All Subdivisions.

Seven hand brakes must be secured on west end and 3 hand brakes must be secured on east end of all eastward trains arriving in Roseville departure yard.

Enginemen taking charge of road engines at RULE 872. Roseville diesel facility and enginemen taking charge of engines at Sacramento and Sparks will consider engines as having been amply supplied with water, fuel and sand.

AIR BRAKE RULES

PASSENGER TRAINS

RULE 17.

Norden to Truckee Norden to Loomis

Without dynamic brake in operation turn up all accessible retaining valves.

FREIGHT AND MIXED TRAINS

Retaining valves must be used on descending grades as follows:

Norden to Truckee, Norden to Loomis MP 131.70 to MP 123.00 (Placerville Branch).

WITHOUT DYNAMIC BRAKE IN OPERATION:

One retaining valve for each 80 tons in train. If gross tonnage exceeds 80 tons per operative brake, retaining valves must be used on all cars and speed must not exceed 15 MPH.

SPECIAL INSTRUCTIONS — ROSEVILLE SUBDIVISION

WITH DYNAMIC BRAKE IN OPERATION:

Permissible Tons Per Unit Without Retaining Valves* Basic-Dynamic **Extended Range** Brake Dynamic Brake 4 Axle 6 Axle 4 Axle 6 Axle 8 Axle With dynamic brake in operation but WITHOUT pressure maintaining system of braking: Norden to Truckee 650 950 800 1200 1600 Norden to Loomis 450 650 550 850 1125 MP 131.70 to MP 123.00 (Placerville Branch) 600 900 725 1075 1450 With dynamic brake in operation and WITH pressure maintaining system of braking: Norden to Truckee 1800 2700 2300 3500 4600 Norden to Loomis 1400 2100 1700 2600 3400 MP 131.70 to MP 123.00

If permissible tonnage is exceeded, one retaining valve must be used for each 150 tons in excess thereof.

2250

1800

2700

3600

1500

(Placerville Branch)

Locomotive classes AF 628, AF 630, EF 425, EF 623, EF 625, EF 630, EF 636, GF 425 (except units 6700-6727), GF 628, GF 630, GF 633, EF 850B and GF 850 are equipped with extended range dynamic brake.

*If any unit having basic dynamic brake is operated with units having extended range dynamic brake, all units in consist must use tonnage authorized for units having basic dynamic brake.

RULE 17-A. Freight trains without dynamic brakes in operation will stop at the following stations for at least 10 minutes for wheel heat radiation.

Eastward	Westward	-
MP 203.0	Troy Emigrant Gap Midas Gold Run Bowman	

Train inspection must be made as prescribed by Rule 827 at all wheel heat radiation stops.

RULE 24-E. Will apply to trains arriving Roseville.

RULE 25. Will apply at Norden when not required to stop and make train air brake tests at that point for other reasons except:

When running test is made at Crystal Lake eastward or approaching MP 209.2 westward.

Westward Freight Trains. Conductor must contact engineer immediately after caboose leaves portal of Tunnel 6 or 41 and before reaching station at Norden and comply with addition to Rule 25, under All Subdivisions.

Eastward Freight Trains. Conductor must contact engineer immediately after engine passes station at Norden and before engine enters west portal of Tunnel 6 or 41 and comply with addition to Rule 25, under All Subdivisions.

RULE 33. Norden to Truckee Norden to Loomis

MP 131.70 to MP 123.00 (Placerville Branch)

Maximum tonnage per operative brake . . . 80 tons, except with dynamic brake and pressure maintaining system of braking in operation with not more than 2500 tons for each six axles of dynamic

brake and speed not exceeding 25 MPH . . . 100 tons. Should dnyamic brake failure occur while handling in excess of 80 tons per operative brake, train may proceed at speed not exceeding 15 MPH if in judgment of conductor and engineer it is safe to do so, and provided retaining valves are used as prescribed by Air Brake Rule 17.

Restrictive grades are as follows:

Eastward	MP 7	го мр	Speed-MPH
Norden to Truckee	192.8	210.0	20
Boca to Floriston	219.0	224.0	25
Verdi to Lawton	229.5	240.0	25
Westward			
Norden to Colfax	193.6	143.6	20
West of Colfax	142.0	138.3	25
West of Colfax to Rocklin	136.5	115.0	20
West of Colfax to Rocklin	115.0	111.3	25
Placery	ille Branch		
Westward	150.0	122.0	20
	117.5	111.7	25
Walnut G	rove Branc	h	
Westward	120.3	119.8	25
	119.8	118.8	20

RULE 39. Running test must be made on westward passenger trains just after emerging from Tunnel No. 6 or Tunnel No. 41.

MISCELLANEOUS

Sacramento: Communicating signal will be used to start passenger train at Sacramento.

Excess width or height loads must not be operated on Sacramento Passenger Station Track 4. Employes must not ride on top or side of engines or cars on Track 4.

Maximum speed on Aerojet spurs, with caution, not to exceed 15 MPH, except over grade crossings 10 MPH.

Engines listed must not operate on tracks shown below: Class of Engine Restricted Tracks

All engines.......Newcastle-Over trestle portion of fruit spurs. All engines......Summit-Lumber spurs Nos. 3 and 4 beyond derail.

Load limit (car and contents):

Sacramento-Sparks	315,000	pounds
Brighton-Elvas	315.000	pounds
Sacramento-Isleton	240,000	pounds
Sacramento-Brighton via R St	240.000	pounds
Brighton-Placerville	240,000	pounds
Folsom Junction-Folsom	240,000	pounds
Citrus-Fair Oaks	240,000	pounds

Unless authorized by Superintendent, heavier loads must not be handled.

Tracks between Roseville and Sparks numbered, and unless otherwise authorized, will be used as double track as follows:

No. 1 westward trains, via Auburn and

No. 2 eastward trains, via Auburn, Nevada Street.

OPERATION OF TURNTABLES

Turntable Norden equipped with rail locks each end. Before moving onto table from any lead table must be lined so engine will enter from locked end only. Engines when backing and approaching table from lead from eastward siding, will stop to clear table and member of crew after properly lining and locking table will signal engineer to move onto table by green light controlled by pushing button located on post of turntable shed on engineer's side. This signal does not indicate position of turntable or turntable lock. Engines leaving turntable will leave from locked end. In making movements to or from turntable it will not be necessary to lock opposite end of table.

Turntable must not be moved until engineer signals fireman

engine is properly spotted and brakes applied.

Engineer or member of crew, preferably engineer, must remain in the cab of engine at all times when engines are being turned at Norden.

Balloon track at MP 169.16, west of Emigrant Gap, diverging from No. 1 Track. Crossover between main tracks located at east end of balloon track at MP 169.55. Engines and equipment will enter balloon track at west switch and leave balloon track at east switch.

Rail connection to the Yolo Port in Sacramento Yard from the clearance point at Washington to the Port Railroad connection at Riske Lane is used jointly by SNRy and SP crews. Movement on joint track governed by block signals whose indications superseded the superiority of trains.

Block indicators located at switches indicate track occupancy. When block indicator shows block clear, switch may be reversed and movement made after block signal displays a yellow aspect.

If block indicator shows block occupied, switch must not be reversed until it has been ascertained that there is no opposing or conflicting movement.

If after switch has been reversed signal displays stop indication, train or engine must wait five minutes and then be preceded by flagman through joint track area.

Maximum speed permitted on joint track is 10 MPH and all movements must be made with caution.

Normal position of switches connecting with joint track is as

SNRY Woodland Branch connection just west of West Capitol Ave. underpass lined for Yolo Port Railroad. East wye switch SNRy Woodland Branch for movement west leg

wye. Sacramento Yolo Port Railroad connection just east of county

road crossing for SNRy west leg of wye.

Sacramento Yolo Port Railroad yard tracks are used jointly by SNRy and SP crews and all movements must be made with caution not exceeding 10 MPH.

Flag protection to the rear is not required when operating in joint track area or over Sacramento Yolo Port Railroad yard tracks.

ROSEVILLE SUBDIVISION

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

MP	Location	Description				
88.54	Sacramento	Sacramento River bridge				
		Side and overhead				
92.15	Elvas	American River bridgeSide				
	*(POL	K-ELVAS)				
131.78	Polk	Traction company overhead crossing				
202110		Overhead				
133.13	Brighton	Signal bridgeOverhead				
	-	ILLE BRANCH)				
122.30	East of White Rock	Rock cutSide				
126.40	Latrobe	Rock cutSide				
126.50	East of Latrobe	Rock cutSide				
128.60	East of Latrobe	Rock cutSide				
128.00						
		ROVE BRANCH)				
92.41	East of Baths	BridgeSide				
111.42	Snodgrass Slough	BridgeSide				
	(ROSEVILLE-SP	ARKS-EASTWARD)				
111.21	East of Rocklin	Antelope Creek BridgeSide				
114.20	East of Rocklin	Tunnel No. 15Side and overhead				
114.70	East of Rocklin	Tunnel No. 16Side and overhead				
117.30	East of Rocklin	Tunnel No. 17Side and overhead				
120.50	East of Newcastle	Tunnel No. 18Side and overhead				
122.70	East of Newcastle	Tunnel No. 19Side and overhead				
123.10	East of Newcastle	Tunnel No. 20Side and overhead				
124.60	East of Nevada St., Auburn	Tunnel No. 21Side and overhead				
131.20	East of Bowman	Tunnel No. 22Side and overhead				
132.70	East of Bowman	Tunnel No. 23Side and overhead				
132.90	East of Bowman	Tunnel No. 24Side and overhead				
133.10	East of Bowman	Tunnel No. 25Side and overhead				
133.30	East of Bowman	Tunnel No. 26Side and overhead				
133.80	East of Bowman	Tunnel No. 27Side and overhead				
134.80	East of Applegate	Tunnel No. 28Side and overhead				
135.90	East of Applegate	Tunnel No. 29Side and overhead				
138.70	East of Applegate	Tunnel No. 30Side and overhead				
139.20	East of Applegate	Tunnel No. 31Side and overhead				
139.40	East of Applegate	Tunnel No. 32Side and overhead				
164.34	East of Midas	Tunnel No. 1Side and overhead				
176.60	East of Emigrant Gap	Tunnel No. 35Side and overhead				
176.90	East of Emigrant Gap	Tunnel No. 36Side and overhead				
177.80	Crystal Lake	Tunnel No. 37Side and overhead				
77.87 to						
198.91	Crystal Lake to Andover	Snow sheds and signals in SnowshedsSide and overhead				

MP	Location	Description				
180.50	East of Cisco	Tunnel No. 38Side and overhead				
180.70	East of Cisco	Tunnel No. 39Overhead				
185.30	East of Cisco	Tunnel No. 40Side and overhead				
193.30	East of Norden	Tunnel No. 41Side and overhead				
200.10	East of Shed 47	Tunnel No. 42Side and overhead				
180.38	East of Cisco	Signal Bridge No. 1804Overhead				
182.38	East of Cisco	Signal Bridge No. 1824Overhead				
184.02	East of Cisco	Signal Bridge No. 1844Overhead				
188.03	East of Troy	Signal Bridge No. 1880Overhead				
189.88	East of Troy	Signal Bridge No. 1900Overhead				
191.75	Norden	Signal Bridge No. 1919Overhead				
201.28	East of Andover	Signal BridgeOverhead				
209.12	East of Truckee	Signal Bridge No. 2096Overhead				
210.60	East of Truckee	Signal Bridge No. 2106 Side and overhead				
212.63	East of Truckee	Signal Bridge No. 2124 Side and overhead				
214.71	East of Truckee	Signal Bridge No. 2146 Side and overhead				
218.05	East of Boca	Signal Bridge No. 2180Side				
220.03	East of Boca	Signal Bridge No. 2200 Side and overhead				
221.88	East of Boca	Signal Bridge No. 2220 Side and overhead				
230.12	East of Floriston	Signal Bridge No. 2300Overhead				
231.50	Verdi	Signal Bridge No. 2316 Side and overhead				
237.02	Lawton	Signal Bridge No. 2370Overhead				
238.90	East of Lawton	Signal Bridge No. 2390Side				
	(SPARKS-ROSEV	ILLE-WESTWARD)				
238.90	West of Reno	Signal Bridge No. 2389Side				
231.50	Verdi	Signal Bridge No. 2317 Side and overhead				
230.12	West of Verdi	Signal Bridge No. 2301Overhead				
229.65	West of Verdi	3rd Truckee River CrossingSide				
221.88	West of Floriston	Signal Bridge No. 2219Overhead				
220.65	West of Floriston	1st Truckee River CrossingSide				
220.03	West of Floriston	Signal Bridge No. 2201Side				
218.26	West of Floriston	Highway BridgeOverhead				
218.05	West of Floriston	Signal Bridge No. 2181Side				
214.71	West of Boca	Signal Bridge No. 2147 Side and overhead				
212.63	West of Boca	Signal Bridge No. 2125 Side and overhead				
212.25	West of Boca	Highway BridgeOverhead				
210.60	West of Boca	Signal Bridge No. 2107Overhead				
209.12	West of Boca	Signal Bridge No. 2109Overhead				
207.55	West of Truckee	Signal Bridge No. 2075Overhead				
200.22	Andover	Tunnel No. 13Side and overhead				
198.91 to	Andover to Crystal Lake	Snowsheds and signals snow sheds				
177.87	rimover to organic mane	Side and overhead				
195.70	West of Shed 47	Tunnel No. 12Side and overhead				
195.20	West of Shed 47	Tunnel No. 11Side and overhead				
195.10	West of Shed 47	Tunnel No. 10Side and overhead				
194.90	West of Shed 47	Tunnel No. 9Side and overhead				
194.30	West of Shed 47	Tunnel No. 8Side and overhead				
194.25	West of Shed 47	Stone WallSide				
194.10	West of Shed 47	Tunnel No. 7Side and overhead				
193.70	West of Shed 47	Tunnel No. 6Side and overhead				
191.75	West of Norden	Signal BridgeOverhead				
189.88	West of Norden	Signal Bridge No. 1901Overhead				
184.40	West of Troy	Signal Bridge No. 1841Overhead				
182.38	West of Troy	Signal Bridge No. 1823Overhead				
181.00	West of Troy	Tunnel No. 4Side				
180.70	West of Troy	Tunnel No. 3Side and overhead				
		Signal Bridge No. 1803Overhead				
180.38	Cisco					
164.34	West of Blue Canon	Tunnel No. 1Side and overhead				
132.90 to	West of New England Mills	Peak Cute				
122.00	to West of Auburn	Rock CutsSide				
127.86	Bowman	Highway BridgeOverhead				
120.50	Newcastle	Tunnel No. 18Side and overhead				
111.21	East of Rocklin	Under StructureSide and overhead				

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other tracks, wyes, balloon	1
tracks, crossovers and turnouts, except:	. 15
Through slip switches	. 10
Through turnouts on other than sidings	. 10
On branches	. 10
On "R" St. Sacramento, between Front St. and	i
Brighton	. 10
On Mather Field spur	. 10
On back tracks or engine leads to turntable	
Sacramento	. 10
On tracks serving McClellan Field (Planehaven)	10
Through siding and turnout at Polk	20
Westward through crossover Norden, from No. 2 to)
No. 1 Track	. 25
Through siding Norden	20

SPECIAL INSTRUCTIONS — ROSEVILLE SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in SPEED RESTRICTIONS FOR ENGINES appearing on pages 6 and 7, and MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT and OTHER MAXIMUM SPEEDS appearing on Page 7 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE SAFETY,

REGARDLESS OF TIME.

	TERRITOR	•	PASSEN- GER TRAINS	FREIGHT AND MIXED		TERRITOR	Y	PASSEN- GER TRAINS	FREIGHT AND MIXED	
MP	МР	Column:	1	2	MP	MP	Column:	1	2	
SPARK					SACR	ARD, SPARKS				
88.54 to	89.20		10	10				30	30	
89.20 to	90.00		25	25		o 242.20 (R	eno)	20	20	
90.00 to	91.61		35	35	242.20 t	o 224.00 💥		45	45	
91.61 to	92.56 (interlo				224.00 t	o 224.00 성 o 211.70 본 o 208.00 년		40	40	
02.02.00		e)	25	25	211.70 t	0 208.00 🛱		45	45	
92 56 to			50	50	208.00 t			30	30	
			70	60				30	25	
			35	35				40	40	
			45	45	108.12 to	0 100.12		35	30	
								15	15	
			15	15				45	45	
106.74 to 1			35	35						
108.12 to 1	13.00		70	60				70	60	
113.00 to 1	41.95 💆		50	50				50	50	
141.95 to 1	93.00 🖺		30	30	92.56 to	91.61 (bridge				
193.00 to 2	00.00		30	25			ng)	25	25	
208.00 to 2	24.00		40	40				35	35	
224.00 to 2			45	45	90.00 to	89.15		25	25	
242.20 to 2		no)	20	20	89.15 to	88.54		10	10	
244.16 to 2			30	30						
	D, POLK TO			20	136.38 to	ARD, ELVAS 135.99 (wye fr	om Roseville)	25	25 20	
			70	60	136.36 to	135.99 (wye ir	rom Sacramento)	20		
			45	45	135.99 to	134.10		40	40	
134.10 to 1	36.00		40	40	134.10 to	132.00		70	60	
		Roseville)	25	25						
136.00 to 1	36.36 (wye to	Sacramento)	20	20	WESTW. BRIGH	ARD, PLACER	RVILLE TO			
FASTWAD	D, BRIGHTO	N TO							10	
PLACER		110							20	
				15					15	
				40					20	
				45					35	
				40					25	
				15					15	
				25					40	
				35					45	
				20					40	
120.00 4- 10	00.00		•••	15					15	
					01.11 00	01.01			10	
			***	20 10						
149.07 to 18	0.01			10		ARD, FOLSOM			20	
E A CTWA DI	, FOLSOM	ICT TO			FULSU	M JC1			20	
FOLSOM	o, rolsom a	JC1. 10		20	WESTWA	RD. FAIROA	KS TO CITRUS		20	
EASTWARI	o, citrus to	O FAIR OAKS		20		ARD, ISLETON				
D 1 000111 5	O LODAN	NAMES AND			SACRA	MENTO:			20	
	, SACRAME	NIU IU			122.09 0	09.09			20	
ISLETON	0.00			20						

At Reno, when engine passes last crossing within limits of restriction in direction of movement, speed may be resumed to that shown on next speed sign.

Freight trains must not exceed 20 MPH (westward) from MP 192.10 (Norden) to MP 113.26 (Loomis) and (eastward) from MP 192.00 (Norden) to MP 209.10 (Truckee) when retaining valves required in accordance with Air Brake Rule 17.

Engine, flanger and caboose only may operate at speeds shown in Column 1, except maximum speed must not exceed 45 MPH on tangent track and 35 MPH on curves, and between Colfax and Truckee, may operate at 35 MPH.

Freight and mixed trains containing no restricted cars are authorized to operate at Column 1 speeds not exceeding 65 MPH under conditions specified in All Subdivisions, Page 8, Miscellaneous, Item No. 28.

RULE 4-B. WPRR timetable bulletins will be posted at Carlin, Wendel and Sparks.

RULE 10-J. Speed signs to right of track with one track intervening:

Westward	Reading		
MP 343.80	70-60		
MP 417.46	70-60		

Speed signs to left of track with one track intervening:

Westward	Reading
MP 245.20	20

Speed signs located to left of track in direction of movement:

Westward	Reading	Eastward	Reading
MP 249.14	30	MP 244.16	30
MP 249.36	70-60	MP 247.14	70-60
MP 266.81	60	MP 248.61	60
MP 276.12	55	MP 252.70	60

RULE 14. Tule: WPRR westward trains must sound whistle signal o - -, when passing sign reading "WP whistle" located at MP 425.10.

Sections of WPRR schedules required to display signals will display green flags in addition to green lights.

RULE 82-A. Extra trains originating at Hazen and operating between Hazen and Fallon will display engine number of the lead unit leaving Hazen and are authorized to operate as extra trains between Hazen and Fallon without obtaining a clearance at Hazen or Fallon.

Unless otherwise provided, eastward trains must not leave Winnemucca without obtaining WPRR clearance and train orders, if any, which will apply on WPRR from Weso to Carlin.

Extra trains originating at Hazen enroute Fallon, in addition to information required by train register, must register destination of trip (turning point) and date of departure in the column captioned "Signals." When trip has been completed, date of arrival at Hazen must also be entered in column captioned "Signals."

An extra train enroute Fallon from Hazen must not leave Hazen until it has been ascertained from the train register that all preceding extra trains via the route to be used have completed their trip and registered time and date of arrival at Hazen accordingly.

RULE 83-B. At open train-order offices, trains may register by ticket as follows:

Carlin.....Westward WPRR trains.

Trains 5 and 6 will register by ticket at Carlin. Train orders and clearances will be delivered by messenger to Train 6.

Yard limits within which the provisions of Rule 93 will apply are established at the following points:

West M	P	East MP
237.49	Sparks	249.48
	Hazen (Mina Branch)	289.47
	Hazen (Fallon Branch)	289.23
356.00	Wendel	
415.36	Mina	
533.40	Carlin	

Eastward trains via Southern Pacific portion of paired track must not pass stop sign located at Mile Post 533.75 unless orally authorized or proceed signal received.

Sparks: When trains are to be crossed over westward main track, switchman must not give proceed signal to engineer until trains moving on westward main track have stopped or crossover switches are lined for movement.

Movement from engine leads must not foul eastward main track except on proceed signal or oral authorization from switchman or on

proceed signal from trainman of the same crew.

Switchman at Sparks must use green flag by day and green light by night in giving proceed signals to trains for movement on yard tracks and when making moves of any kind with road engines unless movements are being made by oral authorization.

RULE D-97 will apply:

Between Sparks and beginning of CTC Vista. From Carlin to Weso and between Rose Creek and beginning CTC Perth.

RULE 99-C. Will apply on Mina Branch.

RULE 103-A. Automatic crossing gates:

At the following stations there are crossings protected by gates which are not actuated when trains are stopping at station to receive or discharge traffic until train starts to move toward crossing, and speed of 10 MPH must not be exceeded until gates are down:

Station	Location	Direction	MP
Reno	Sierra St	Westward	242.80
Reno	Virginia St	Westward	243.00
Reno	Center St	Westward	243.10

Locations at which train must stop to avoid unnecessary operation of crossing gates while receiving or discharging traffic:

Station	Location	Direction
Reno	60 ft. east of Center St	Westward
Reno	230 ft. east of Virginia St	Westward
Reno	60 ft. east of Virginia St	Westward
Winnemucca	200 ft. west of Bridge St	Eastward

Winnemucca: Westward freight trains stopping to perform switching must leave train east of Bridge St. crossing or in siding, so as not to block crossing while engine is being attached or detached.

Eastward trains stopping on main track or siding at Winnemucca must stop 200 feet west of Bridge St. Markers on south side of tracks.

Battle Mountain: Freight trains stopping to perform switching must leave train east of main road crossing to avoid blocking crossing when engine is coupled to train.

RULE 104. The normal position of rigid switches at end of double track and junctions is as follows:

Hazen (Mina Branch)......For controlled siding. Hazen (Fallon Branch)For Mina Branch.

RULE 107. Station train indicator provided in approach to following station:

Westward

Reno (On signal bridge with Signal 2437)

When illuminated this indicator will convey the following information:

TRAIN—Train at platform on opposite track. CLEAR—Indicator in service.

When neither TRAIN nor CLEAR is illuminated, indicator is out of service and prompt report must be made to chief train dispatcher.

RULE 204. WPRR train orders and clearances will be issued at SP train order office Wendel, and will apply to those who are to execute them on WPRR tracks between Flanigan and Weso.

RULE 221. Lights will not be displayed in train order signals on the Mina Branch.

RULE D-251 will apply as follows:

On both tracks between Sparks and beginning of CTC Vista. On both tracks from end of CTC Perth to Rose Creek.
On both main tracks between MP 336.50, Flanigan and inter-

locking limits, MP 337.70.

SPECIAL INSTRUCTIONS — SPARKS SUBDIVISION

RULE 292. Carlin: Eastward SP trains or engines moving from west detour to Carlin Yard must not pass light unit mounted on mast at MP 534.10 on west detour unless flashing white light is displayed or proceed signal is received from switchman or orally authorized to proceed.

When flashing white light is displayed, trains and engines may proceed at restricted speed on route lined without stopping.

RULE 306. The following block signals equipped with triangular plate bearing the letter "P" have included in their control limits some special protective device. Absolute signals are listed as "P-A" or "P-SA"; interlocking signals are listed as "I" or "P-SA."

rd Protection	Westward Signal
	P-A
Rock slide fence, MP 252.47	P-A
Rock slide fence, MP 254.52	
	P-A
Rock slide fence, MP 256.59	P-A
Collision detector, roadway underpass, MP 275.36	P-A P-A
Spring switch west end siding, Winnemucca	
Spring switch east end siding, Winneumcca	P-I
Rock slide fence, MP 517.50-MP 518.10	P-5181
Rock slide fence, MP 524.38	P-5255
Rock slide fence, MP 527.00-MP 527.57	
Rock slide fence, MP 530.65-MP 530.73	
	Protection Rock slide fence, MP 252.47 Rock slide fence, MP 254.52 Rock slide fence, MP 256.59 Collision detector, roadway underpass, MP 275.36 Spring switch west end siding, Winnemucca Spring switch east end siding, Winnemucca Rock slide fence, MP 517.50-MP 518.10 Rock slide fence, MP 524.38 Rock slide fence, MP 527.00-MP 527.57 Rock slide fence, MP 530.54-MP 530.57

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

Sparks: Eastward freight trains, except BAX, OVE, and R Blocks, must stop before passing Signal 2452 unless proceed signal received from switchman or orally authorized. If proceed signal received from switchman or orally authorized and signal displays stop indication, movement may be made as prescribed by Rule 507. Signal 2468 governs movement of eastward trains from yard

Signal 2468 governs movement of eastward trains from yard tracks. This signal is normally dark until switches are lined for crossover movement. If proceed signal received from switchman or orally authorized and signal displays stop indication, train may proceed in accordance with Rule 513.

orally authorized and signal displays stop indication, train may proceed in accordance with Rule 513.

Westward freight trains, except Advance FMS, FMS, Adv. WCM or WCM, must stop before passing Signal 2467 unless proceed signal received from switchman or orally authorized. If proceed signal received from switchman or orally authorized, and signal displays stop indication, movement may be made as prescribed by Rule 507.

Carlin: Signal 5345 governs movement of westward trains from yard tracks and is normally dark until switches are lined for crossover movement. If proceed signal received from switchman or orally authorized, and signal displays stop indication, train may proceed in accordance with Rule 513.

Flanigan: Automatic block signals on both main tracks between MP 336.50 and interlocking limits MP 337.80 govern movements and designated current of traffic only.

Westward interlocking signal west end double track MP 336.50 governs movements via WPRR Main Track.

RULE 535. SPRING SWITCHES

Spring switches equipped with facing point locks are located as follows:

Location	Normal Position
WinnemuccaEast end siding	Main track
WinnemuccaWest end siding	Main track
WesoWest switch, west cro	ssover
between SP and WPR	
	WPRR main track
*LovelockWest end westward sidi	ng Westward track
*LovelockEast end eastward sidin	g Eastward track
*Rye PatchEast end middle siding.	
WesoEast switch, east crosso	vor
between WPRR and S	
	WPRR main track
*MoteWest end siding	
(Push buttons in box on relay cas	se north of signal)
* MoselWest end siding	Main track
(Push buttons in box on relay cas	e south of signal)
*Equipped with switch point indicator.	se south of signar)
Equipped with switch point mulcator.	

Sparks: Spring switches equipped with switch point indicators are located as follows:

East end of Tracks 21 and 22. West end of Tracks 21 and 23.

RULE 605. INTERLOCKING

Wendel-Flanigan: Limits extend between westward signal west end double track MP 337.7, Flanigan and eastward signal MP 356.6, Wendel, and is under control of operator, Wendel.

Train using switches at Herlong must occupy main track continuously or leave main track switch open while work is being performed. Tracks at Herlong must not be used for meeting or passing of trains.

Flanigan: Beginning of WPRR TCS, MP 336.33.

Winnemucca: Limits extend between eastward signals located at end of double track Rose Creek, MP 406.50 and Weso, MP 420.75.

Trains required to enter siding must not pass interlocking signal in advance of spring switch until switch has been lined for siding. Telephones located at interlocking signals.

Weso: Limits extend between eastward signal on SP track, MP 420.75 and eastward signal on WPRR track, MP 535.80 to westward signals on SP track, MP 421.00 and westward signal on WPRR track, MP 536.00 and is under the control of WPRR train dispatcher at Sacramento.

East switch of west crossover and west switch of east crossover are dual control switches. When necessary to hand throw these switches permission must be obtained from WPRR train dispatcher, except when movement is made under the provisions of Rule 663(c), and be governed by Rules 771 and 772. Telephones located at interlocking signals.

West switch of west crossover equipped with an electric switch lock. Permission must be obtained from WPRR train dispatcher before movement is made through crossovers from WPRR main track

to SP main track and be governed by Rule 663(b).

SPECIAL INSTRUCTIONS - SPARKS SUBDIVISION

When interlocking signals display stop indication and cannot be cleared by WPRR train dispatcher, movement, except westward movement to WPRR track, may be made under the provisions of Rule 663(b), except if unable to contact WPRR train dispatcher and it can be seen there is no train closely approaching the route to be used, movement may be made as prescribed by Rule 663(c). When movement is made under the provisions of Rule 663(c), a member of crew must examine switches to see that points are in proper position for movement, and on dual control switches that selector level is placed in "hand" position until movement over switch has been completed. After movement has been completed dual control switches must be restored to "motor" position and locked.

When interlocking signals display stop indication, westward movement to WPRR track may only be made as prescribed by WPRR

Rule 509(a).

Westward inferior WPRR trains must arrive Weso sufficiently in advance of superior WPRR trains to avoid delaying them between Weso and Winnemucca.

Letter "A" has been added to westward home signal at Weso.

Letter "A" applies to WPRR only.

RULE 705. LETTER TYPE INDICATORS Indicators located as follows:

Illum. Letter	On Signal	Approaching	Authorizes and requires movement as follows
S	3428	.West end eastward siding, Lovelock	Enter eastward siding and remain until let- ter "M" displayed.
М	3429	**West end westward siding, Lovelock	Enter main track and
м	2440	***************************************	proceed as prescribed by Rule D-251.
IVI	3442	**East end eastward	
		siding, Lovelock	proceed as prescribed by Rule D-251.
S	3449	East end westward siding, Lovelock	Enter westward siding and remain until let- ter "M" displayed.
S	3642	*** West end center	ter in displayed.
		siding, Rye Patch	Enter siding and con- tact dispatcher.
S	3663	***East end center	oner ansparence.
		siding, Rye Patch	Enter siding and con- tact dispatcher.
S	P-1	Winnemucca eastward.	Enter siding
SSign	P-1 al 5091 .	Winnemucca westward. East end siding,	
		Beowawe	Enter siding and remain until letter "M" is displayed.
M7-ft	. mast	** West end siding,	
MP	507.74	Beowawe	Enter main track and

by Rule D-251. S3428, S3449, S5091: Train taking siding because of the "S" indication located at the above signals, if letter "M" cannot be illuminated and if no means of communication are available, train may proceed after complying with Rules 513 and D-251.

proceed as prescribed

When illuminated Letter "S" is displayed on Signal 5091, Signal 5091 will display red aspect and Signal 5107 will display yellow

aspect.

*When necessary to use siding and Letter "S" is not displayed, permission must first be obtained from train dispatcher.

**Display of Letter "M" for trains does not relieve conductors and

engineers of compliance with Rule 513.

**Trains, after entering siding and if no means of communication available, may proceed after complying with Rule 513 and D-251.

RULE 705. HOT BOX DETECTORS

Illum. Letter	On Signal	Approaching	Location of Readou
			Westward Absolute Signal W. E. Thisbe
W	2684	Fernley	Oignar W. E. Tilisbe
W	2713	Thisbe	
H	2742	Fernley	Eastward Absolute
	2945	-	Signal E. E. Fernley Westward Absolute Signal W. E. Massie
W	2956	Ungal	Signal W. E. Massie
w	2979	Mossio	
н	2008	Ungol	Eastward Absolute
			Signal E. E. Ungal
			Westward Absolute Signal W. E. Ocala
W	3224	Tov	g Zi otala
W	2055	Ocala	
н	3256	Toy	Eastward Absolute
W	3460	Calada	Signal E. E. Toy
Ц	9470	Colodo	MD oro E C 1 1
U	9541	Colado	MP 350.7 Colado
W	3541	Colado	MP 350.7 Colado
W	3559	Colado	
VV	3784	Imlay	
H	3824	Imlay	MP 384.2 Imlay
H	3855	Imlay	MP 383.1 Imlay
W	3881	Imlay	
H	4103	Rose Creek	MP 407.8 Rose Creek
W	4104	Winnemucca	
W	4127	Rose Creek	
H	4150	Winnemucca	MP 417.4 Winnemucca
H	4243	Tule	MP 422 8 Tule
W	4293	Tule	122.0 Tule
H	4631	Valmy	MP 460.5 Valmy
W	4653	Mote	MI 400.5 valing
H	4893	Argenta	MP 487.4 Argenta
W	4917	Argenta	WIF 407.4 Argenta
H	5001	Desman	MP 507.7 Beowawe
W	5199	Deowawe	MP 507.7 Beowawe
VV	5133	beowawe	

MP	Direction	Location
251.6	West	Hafed
270.5	East and West	Thisbe-Fernley
297.0	East and West	Massie-Unsal
323.7	East and West	Ocala-Tov
346.2	East	Lovelock-Colado
355.8	West	Colado-Woolsey
380.2	East	Humboldt-Imlay
387.2	West	Imlay-Mill City
412.0	East and West	Rose Creek-Winnemucca
427.3	West	Tule-Golconda
465.0	West	Valmy-Mote
491.0	West	Argenta-Mosel
512.5	West	Beowawe-Harney
639.1 (WPRR)East	Carlin

When westward Signal 4655, west end Mote, displays stop indication and W letter type indicator on Signal 4653 is illuminated, train must not proceed until W is extinguished. Refer to Rule 705 All Subdivision.

CENTRALIZED TRAFFIC CONTROL Limits extend from MP 249.27 Vista to MP 340.26 Perth.

GENERAL REGULATIONS

RULE 812. Be governed by current timetables, bulletins and rules of WPRR, on WPRR track between Weso and Carlin.

SP trains and engines are authorized to operate over WPRR tracks between WPRR MP 384.38, Flanigan and WPRR MP 535.94, Weso and existing WPRR paired track connection Weso subject to WPRR rules Operating Department, timetable and special instructions, and timetable bulletins.

RULE 824. Loaded cars must not be switched at Thorne unless air brakes are cut in and in service on all cars.

Not less than five hand brakes must be set on east end of freight trains or cars in Sparks yard. Hand brakes will not be set if outgoing crew takes charge of train on arrival and if inbound crew is advised by yardmaster that engine is not to be detached.

RULE 827. Dragging equipment detectors located at:

MP	Location
479.65	East of Battle Mountain
498.60	East of Mosel
512.90	East of Beowawe

Refer to Rule 827, All Subdivisions.

RULE 872. Enginemen taking charge of road engines at Sparks and Carlin will consider engines as having been amply supplied with fuel, water and sand.

AIR BRAKE RULES

FREIGHT AND MIXED TRAINS

Retaining valves must be used on descending RULE 17. grades as follows:

Reservation to Schurz

WITHOUT DYNAMIC BRAKE IN OPERATION: One retaining valve for each 80 tons in train. If gross tonnage exceeds 80 tons per operative brake, retaining valves must be used on all cars and speed must not exceed 15 MPH.

WITH DYNAMIC BRAKE IN OPERATION: Permissible Tons Per Unit Without Retaining Valves* Basic-Dynamic **Extended Range** Dynamic Brake Brake 4 Axle 6 Axle 4 Axle 6 Axle 8 Axle

With dynamic brake in operation but WITH-OUT pressure main-					
taining system of braking With dynamic brake	650	950	800	1200	1600
in operation and WITH pressure maintaining system of braking	1600	2400	2000	3000	4000

If permissible tonnage is exceeded, one retaining valve must be used for each 150 tons in excess thereof.

Locomotive classes AF 628, AF 630, EF 425, EF 623, EF 625, EF 630, EF 636, GF 425 (except units 6700-6727), GF 628, GF 630, GF 633, EF 850B and GF 850 are equipped with extended range dynamic brake.

*If any unit having basic dynamic brake is operated with units having extended range dynamic brake, all units in consist must use ton-nage authorized for units having basic dynamic brake.

RULE 24-B. Sparks: Incoming engineer, after completing stop, must make a full service brake application leaving brakes applied. When outgoing crew takes charge of train on arrival or otherwise is assured, upon request, that continuity of brake pipe has not been disturbed, engineer will release brake and proceed

FREIGHT TRAINS

RULE 25. Will apply to eastward trains at Reservation when retaining valves are being used.

Reservation to Schurz

Maximum tonnage per operative brake-80 tons, except with dynamic brake and pressure maintaining system of braking in operation: with not more than 20 cars for each six axles of dynamic brake; with speed not exceeding 25 MPH, and with all retaining valves on loaded cars in high pressure position - 100 tons.

Should dynamic brake failure occur while handling in excess of 80 tons per operative brake, train may proceed at speed not exceeding 15 MPH if in judgment of conductor and engineer it is safe to do so, and provided retaining valves are used as prescribed by Air Brake

Rule 17. Restrictive grades are as follows:

MINA BRANCH

Eastward	MP to MP	Speed MPH
	337.5 340.0	25
	347.5 351.5	25
	394.2 396.6	25
Westward	394.2 393.0	25

MISCELLANEOUS

To reduce hazard incident to blasting operations of Nevada Barth, Inc., radio transmitter must not be used between Mile Post 523 and Mile Post 517, between the hours of 6:30 AM and 4:00 PM,

Do not exceed 3 MPH while operating over Nevada Barth Company track scales at Barth.

Engines listed must not operate on tracks shown below:

Class of Engine		nestricted ridens
All engines	East Colado — Beyond track at either end track.	curved portion of of Nevada Barth
	Carlin-Vogler spur	over track scale.

Restricted Tracks

All except AS407, 409, 410, ES 406, 408, 409, BS 412, GS 404, 407

Class of Engine

WPRR interchange.

Load limit (car and contents):	
Sparks-Carlin	315,000 pounds
*Hazen-Fallon	263,000 pounds
Hazen-Wabuska	281,000 pounds
Wabuska-Mina	263,000 pounds

*Speed of trains handling cars with gross weight in excess of 199,000 pounds must not exceed 20 MPH.

Unless authorized by Superintendent, heavier loads must not be handled.

SP and WPRR eastward trains will use WPRR track from Weso to Carlin being governed by WPRR rules, timetable, special instructions and timetable bulletins.

SP and WPRR westward trains will use SP track from Carlin to Weso being governed by SP rules, timetable, special instructions and timetable bulletins.

Current of traffic on SP track from Carlin to Weso is westward trains will operate under SP rules applicable to double track. Movements against the current of traffic on SP track must not be made except under flag protection or as authorized by train order.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

MP Location Description

Impaired clearance in toe path exists on north side of house tracks Sparks where industry has cement unloading facility.

249.84	VistaOverhead & side
250.99	VistaOverhead & side
258.07	PatrickOverhead & side
299.87	WadsworthTruckee River bridge No. 1Side
295.05	Government canal bridgeSide
302.08	Fallon Carson River bridgeSide
302.50	FallonGovernment canal bridgeSide
518.91	BarthHumboldt River bridge No. 6Side
519.68	Barth
523.25	
523.34	
525.15	Palisade Humboldt River bridge No. 15Side
525.20	Palisade Tunnel No. 1 Overhead & side
525.42	PalisadeHumboldt River bridge No. 16Side

SPECIAL INSTRUCTIONS — SPARKS SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in SPEED RESTRICTIONS FOR ENGINES appearing on pages 6 and 7, and MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT and OTHER MAXIMUM SPEEDS appearing on page 7 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE SAFETY,

REGARDLESS OF TIME.

FREIGHT AND MIXED	PASSEN- GER TRAINS		TERRITORY		FREIGHT AND MIXED	PASSEN- GER TRAINS	DRY	TERRITOR
2	1	Column:	MP	MP	2	1	Column:	MP MP
		TO SPARKS	ARD, CARLIN	WESTW	The state of		S TO WESO:	STWARD, SPARKS
25	25	TO DITIMID.	o 533.90	534.80 t	30	30		6.20 to 247.14
60	60		o 530.51	533.90 t	60	70		7.14 to 249.36
60	70		o 528.00	530 51 t	60	60		9.36 to 249.40
			o 525.86	528 00 t	60	70		9.40 to 252.06
45	45		o 517.90	525.86 t	40	40		2.06 to 252.70
50	55		o 500.91	517 90 +	60	60		2.70 to 253.80
60	70	***************************************	o 500.31	500.01 +	60	70		3.80 to 256.72
 60	65		o 476.00	500.31	60	70		6.72 to 262.34
60	70		0 476.00	476.00 +	60	60		2.34 to 264.81
45	45		o 475.30	475.00 0	60	70		4.81 to 270.85
60	70		0 443.84	475.30 to		60		0.85 to 273.76
60	70)	0 442.60 (428.62)	443.84 to	60		• • • • • • • • • • • • • • • • • • • •	0.00 to 210.10
60	60		o 424.74	428.62 to	55	55		3.76 to 274.12
60	70		0 422.29	424.74 to	60	70		4.12 to 340.16
60	70		0 421.86	422.29 to	60	60	ugh turnout)	0.16 to 240.23 (throu
60	70		0 420.87	421.86 to	60	70		0.23 to 343.80
60	70		0 417.46	420.87 to	40	40		3.80 to 344.80
45	45	mucca)	0 417.44 (Winner	417.46 to	60	70		4.80 to 406.50
60	70		0 406.54	417.44 to	60	60	igh turnout)	5.50 to 406.54 (through
60	60	h turnout)	406.50 (through	406.54 to	60	70		3.54 to 417.44
60	70		344.80	406.50 to	45	45	nemucca)	.44 to 417.46 (Winner
40	40		343.80	344.80 to	60	70		.46 to 420.87
60	70		340.23	343.80 to	00		hrough crossover	0.87 to WP 535.97 (th
60	60	h turmout)	340.16 (through		25	25	mough crossover	o WPRR)
	70	n turnout)	274.12	340 16 to	20	20		o 111 Ital)
60			273.76	274 19 to				
55	55		270.85	279.12 to				
60	60		064 01	270.70 0				
60	70		264.81	270.00 0				
60	60		262.34	204.01 10				
60	70		253.80	262.34 to		1111111		
60	60		252.70	253.80 to				
40	40		252.06	252.70 to				
60	70		249.40	252.06 to	LVIII			
60	60		249.36	249.40 to				
60	70		247.14	249.36 to	of the same			
30	30		246.20	247.14 to				
30	30							

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS

With Caution Not Exceeding MPH

Through yard and other tracks, crossovers and turn-	
outs, except:	15
Through turnouts on other than sidings	10
On any wye	10

SPEED RESTRICTIONS ON SIDINGS AND CROSSOVERS

Location	Speed	Location	Speed
Hafed	20	Lovelock-North	15
Patrick	20	Lovelock-South	15
Clark	20	Rye Patch	
Thisbe	25	Imlay	15
Fernley	20	Cosgrave	
Darwin .*		Winnemucca	
Hazen	20	Preble (Crossover)	20
Massie		Iron Point	20
Upsal	25	Mote	20
Parran		Battle Mountain	20
Ocala	25	Mosel	20
Toy		Beowawe	
Granite Point	25		20

Freight trains are authorized to operate at Column 1 speeds not exceeding 65 mph when consist contains no restricted cars, does not exceed 80 tons per operative brake, and 120 cars.

At Battle Mountain, when engine passes last crossing within limits of restriction in direction of movement, speed may be resumed

to that shown on next speed sign.

Western Pacific Train WMX with no restricted cars, not more than 70 tons per operative brake or 70 cars, is permitted to operate at Column 1 speeds not exceeding 70 miles per hour on the Southern Pacific's portion of the paired track between Alazon and Weso.

SPECIAL INSTRUCTIONS - SPARKS SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in SPEED RESTRICTIONS FOR ENGINES appearing on pages 6 and 7, and MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT and OTHER MAXIMUM SPEEDS appearing on page 7 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE SAFETY,

REGARDLESS OF TIME.

	TERRITORY		PASSEN- GER TRAINS	FREIGHT AND MIXED	1	TERRITORY	PASSEN- GER TRAINS	FREIGHT AND MIXED		
MP	MP	Column:	1	2	MP	MP	Column:	1	2	
FASTW	ARD, HAZEN T	O MINA:			① WESTW	ARD, MINA T	O HAZEN:			
	o 288.62		25	25				25	25	
	o 288.73		30	30				20	20	
	o 296.18		49	49				25	25	
	o 297.09		40	40				20	20	
	o 299.90		49	49				35	35	
	0 301.06		40	40			·····	20	20	
	0 301.56		35	35				15	15	
	0 302.95		40	40				20	20	
			35	35			· · · · · · · · · · · · · · · · · · ·	49	49	
	0 303.36			49				35	35	
	315.53		49	49				40	40	
	317.13		40					35	35	
	317.23		30	30				40	40	
	318.06		49	49				25		
	318.15		25	25					25	
	319.21		40	40				49	49	
	319.57		35	35				30	30	
	324.68		40	40				40	40	
	325.10		35	35				49	49	
	328.00		49	49				35	35	
	349.67		20	20				40	40	
	349.76		15	15				35	35	
	357.50		20	20				40	40	
	361.50		35	35				49	49	
	369.83		20	20	297.09 to	296.18		40	40	
	371.08		25	25				49	49	
371.08 to	383.00	A	20	20	288.73 to	288.62		30	30	
83.00 to	417.00		25	25	288.62 to	288.35		25	25	
EASTWA	RD, HAZEN TO) FALLON:			WESTWA	ARD, FALLON	TO HAZEN:			
	303.90		25	25				25	25	

© EF415A class engines must not exceed 25 MPH between Wabuska and Mina, and Hazen and Fallon.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS

With Caution Not Exceeding MPH

Through sidings, yard and other tracks, wyes, crossovers and turnouts.....

10

SPECIAL INSTRUCTIONS — OGDEN SUBDIVISION

RULE 10-1. Rule 10-I may be applied Alazon to Carlin to WPRR trains without issuance of Form Y train orders.

Trains and engines operating Alazon to Carlin must proceed prepared to respect yellow "Proceed Prepared to Stop" signs and red "Conditional Stop" signs displayed in accordance with this rule, and when so displayed such trains may proceed only as prescribed by this rule. by this rule.

RULE 10-J. Speed sign to right of track with one track

Westward	Reading	Eastward	Reading
MP 607.10	70-60	MP 606.63	40
			Reading
MP 754.50 MP 754.50 MP 641.51	Thru Turnout 20 70-60	MP 616.25	50
	MP 607.10 Speed signs to Westward MP 754.50 MP 754.50	Westward Reading MP 607.10 70–60 Speed signs to left of track in direct Westward Reading MP 754.50 20 No. 2 Track MP 754.50 Thru Turnout 20	Westward Reading Eastward MP 607.10 70-60 MP 606.63 Speed signs to left of track in direction of movement: Westward Reading Eastward MP 754.50 20 No. 2 Track MP 616.25 MP 754.50 Thru Turnout 20

Speed signs duplicated to left of track:

Westward	Reading	Eastward	Reading
MP 754.50	60	MP 616.84	60
MP 739.70	70-60	MP 737.70	60
		MP 737.20	20

Eastward SP regular trains authorized on WPRR are also authorized to assume corresponding schedule or section of

schedule at Alazon without obtaining SP clearance.

WPRR regular trains authorized on WPRR are also authorized to assume corresponding schedule or section of schedule at Alazon without obtaining SP clearance.

WPRR trains originating at WPRR Elko must obtain SP clearance "OK'd" by SP chief train dispatcher.

RULE 83-A. Engineers on light engines terminating at Odgen, will register at Engine Crew Dispatcher's office instead of 'YD" telegraph office.

Train register for this purpose is located in Engine Crew Dispatcher's office, Ogden.

RULE 83-B. Trains 5 and 6 will register by ticket at Carlin. Train orders and clearances will be delivered by messenger to Train

RULE 86. Engines using main track within yard limits Elko must clear the time of first-class trains.

Yard limits within which the provisions of Rule 93 will apply, are established at the following points:

West M	IP															1	East MP
533.40	Carlin			,			,										. 536.46
004.02	Ogden .		7.4			- 2	92										557 99

RULE D-97 applies:

Between Alazon and Moor. Between Valley Pass and Lucin and between Bridge and Ogden. From Alazon to Carlin, except for engines using main track within Elko yard limits.

RULE 103-A. Wells: Eastward trains occupying track No. 2 will cut crossing from a point at least 5 car lengths west of main crossing just west of station to allow passengers to pass between station and passenger train.

Elko: Trains stopping to perform switching must leave train to clear all street crossings.

Trains stop clear of crossing west of station when doing switching.

RULE 204. Westward WPRR trains of the Ogden or Sparks Subdivisions, with the same conductor and engineer operating through Carlin, may be issued train orders on one subdivision that affect their movement on the other or both subdivisions.

When train orders are issued at Carlin which affect movement of SP trains east of Alazon, train-order operator must deliver such train orders with a clearance OK'd by SP chief train dispatcher.

RULE 206. Second paragraph will not apply to WPRR engines between Alazon and Carlin.

RULE 221. Elko is a train-order office only for train originating.

RULE D-251 will apply as follows:

On both tracks between Alazon and Moor, between Valley Pass and Lucin and between Bridge and Ogden.

From Alazon to Carlin, except for engines using main track within Elko yard limits.

RULE 292. Carlin: Westward freight trains or engines must not pass Signal 5359 unless flashing white light is displayed or proceed signal is received from yardman or orally authorized to proceed. Telephone located in shanty at east end of yard.

When Signal 5359 displays stop indication and flashing white light is displayed, such trains and engines may proceed without stopping on main track or diverging route at restricted speed.

RULE 306. The following block signals equipped with triangular plate bearing the letter "P" have included in their control limits some special protective device. Absolute signals are listed as P-A or P-SA:

Eastward Signal	Protection	Westward Signal
P-7802	Rock slide fence over east portal Tunnel 2. Rock slide fence MP 541.08	. P-5427 . P-5673 . P-5915 . P-5915 . P-7805 . P-7803 . P-7801 . P-SA

SPECIAL INSTRUCTIONS - OGDEN SUBDIVISION

Eastward Signal	Protection Westward Signal
P-A	Spring switch west end westward siding, Valley Pass
P-SA	Spring switch west end crossover east end, Valley Pass
	High water detector Culvert MP 672.14 westward track
	High water detector Culvert MP 677.32 westward track
	High water detector Culvert MP 679.33 P-SA westward track
P-6780	High water detector Culvert MP 679.33
	Spring switch east end eastward siding, Lucin
P-A	Dragging equipment detector, Lakeside
*P-7428	Fill slide detector (No. 1 track) P-A MP 743.25
**P-7476	Fill slide detector, east of Midlake, MP 747.66
	***Pragging equipment detector (No. 1 track) MP 756.85

*Member of crew must flag length of block.

**Limits of fill slide detector will be indicated by rotating red light when fill detector is actuated. Revolving red lights located as follows:

Eastward .														MP 747.6	
Westward.														MP 748.1	L

***Detector is self restoring to clear 100-L signal after inspection of train, push button on C.T.C. house south side of track.

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

RULE 505. Automatic block signal system: Westward trains moving from SP-D&RGW connection to main track must stop at Signal P-7801 and member of crew must push button bearing number P-7801 located on signal case. When Signal P-7801 indicates proceed, train may proceed.

Westward trains finding Signal P-7803 in stop position after stopping, member of crew must push button bearing number P-7803 located on signal case. When Signal P-7803 indicates pro-

ceed, train may proceed.

After member of crew has actuated push button, if signal does not clear, train may then proceed only after complying with Rules 513 and 507, and in addition careful examination must be made of all facing point switches.

East Carlin: Detour extends from east ice house lead on SP to East Carlin on WPRR.

Eastward SP freight trains and other trains when so directed, also engines moving between WPRR and SP yards will use East Carlin and/or West Carlin detours.

West Elko: Detour extends from WPRR yard to West Elko on SP main track.

Junction switch is a spring switch and normal position is for

Westward WPRR trains leaving yard via detour must enter approach circuit to indicate that such trains are ready to depart, and must not foul SP main track until letter "M" is displayed, or

authority received from SP train dispatcher.

When Signal 5545 on SP main track displays stop indication, westward trains on SP main track after stopping and obtaining train dispatcher's permission may proceed under the provisions of Rule 507, provided it can be seen that there is no train or engine closely approaching west end of detour to enter SP main track.

Elko: East detour extends from SP siding to WPRR freight yard.

Montello: When Signal 6621 displays stop indication, permission must be obtained from train dispatcher before applying

When "S" indicator is lighted on Signal 6639 for westward

trains, Signals 6639 and 6657 will display approach aspect, covered by Rule 285.

When "S" indicator is lighted on Signal 6602 for eastward trains, Signal 6602 will display approach aspect, covered by Rule 285.

RULE 507. Elko: When westward Signal 5565 displays stop indication, westward Southern Pacific freight trains must stop clear of Fourteenth Street crossing, and not proceed until signal displays proceed indication or it can be ascertained the block is not occupied by a preceding train or engine. Telephone installed in booth east of Fourteenth Street on north side of track:

RULE 535. SPRING SWITCHES

Spring switches equipped with facing point locks are located as follows:

Location					N	O	rr	nal Position
Moor			. East end crossover		٠.			Main track
Moor			. East end eastward siding .					Main track
Valley Pass			. West end westward siding					Main track
Valley Pass			. West end crossover					Main track
Lucin			. East end eastward siding.					Main track

Spring switches not equipped with facing point locks are located as follows:

Location		Normal Position
*West Elko	West end WP detour	Main track
*Halleck	West end siding	. Westward track
*Alazon	West switch of crossover between SP and WPRR	
	main tracks	SP main track
*Wells	East end siding	Eastward track
*Montello	East end siding	. Eastward track
*Montello.	West end siding	Westward track
Lucin	West end westward	
Ducini	siding	Westward track
*Little Mountain	West end siding	Westward track
*Little Mountain	East end siding	Eastward track
Orden	. Junction switch SP	. Dabenara vraca
	DRGW connection	. Main track
*Ogden	West siwtch crossover MP 780.15	Main track
*Orden	East switch crossover	. Main crack
Oguen	MP 780.15	. Crossover

^{*}Equipped with switch-point indicator.

siding

RULE 705. LETTER TYPE INDICATORS

Illum. Letter	On Signal	Approaching	Authorized and requires movement as follows:
M	.5543	** WPRR con-	
		nection	
		West Elko	Enter main track and proceed as prescribed by Rule D-251.
M	.5565	Elko	Indicator applies to WPRR freight trains only. WPRR freight trains proceed on main track.
			If letter "M" is not displayed, WPRR freight trains enter SP siding and proceed through crossover to WPRR freight yard.
Т	.5743	Elburz	Call train dispatcher from first telephone.
M	5765	**West end	•
		siding	
		Halleck	.Enter main track and proceed as prescribed by Rule D-251.
S	5787	Halleck	Enter siding at Halleck and re- main in siding until letter "M" is displayed.
M	7-ft. mast	West end	sale versione acceptance

Deeth Enter main track and proceed

as prescribed by Rule D-251.

Letter	On Signal	Approaching	movement as follows:
S	5915	East ead	The State of
		siding	
		Deeth	Enter siding and remain until
0	0050		letter "M" is displayed.
S	6052		
		eastward	
		siding, Wells	Enter eastward siding and re-
			main until letter "M" is dis
м	6080	**East end	played.
IVI	0000		
		eastward	Enter main track and pro-
		siding, wells	ceed as prescribed by Rule D-251.
S	6095	East end	D-201.
		westward	
			Enter westward siding and re-
		Д, т, с	main until letter "M" is dis-
M	7-ft. mast	** West end	played.
	MP 606.76		
	WIP 606.76		F-4 1
		siding, wells	Enter main track and proceed as prescribed by Rule D-251.
8	6602	**West end	as prescribed by Rule D-251.
O	0002	eastward	
		siding,	
		Montello	Enter eastward siding and re-
		Montello	main until letter "M" is dis-
M 4	6628	** East end	played.
141	0020	eastward	
		siding,	
		Montello	Enter main track and proceed
		Monteno	as prescribed by Pule D 951
9 6	6639	East end	as prescribed by Rule D-251.
0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	westward	
		siding,	
		Montello	Enter westward siding and re-
		Montello	main until letter "M" is dis-
			played.
М 6	6623	** West end	played.
	,020	westward	
		siding,	
		Montello	Enter main track and proceed
			as prescribed by Rule D-251.
S7	652	West end	as prescribed by Rule D-201.
		center siding,	
		Little	
		Mountainl	Enter siding and remain until letter "M" is displayed.
M 7	676	**East end	letter M is displayed.
*1	070	center siding,	
		Little	
			Enter main track and proceed
		Mountain	as prescribed by Rule D-251.
3 7	695	East end	as prescribed by Rule D-201.
	000	center siding,	
		Little	
		MountainI	Enter siding and remain until letter "M" displayed.
vr n	667	**West end	letter M displayed.
v17	007		
		center siding,	
		Little	
		Mountain	Enter main track and proceed as prescribed by Rule D-251.

Display of letter "M" at West Elko, Halleck, Deeth, Montello, Wells, or Little Mountain, does not relieve conductors or engineers of

compliance with Rule 513.

When letter "M" is displayed on Signal 6628 or Signal 6623 at Montello and signal displays stop indication, train may proceed under the provisions of Rule 507 after first complying with Rule 513.

Track No. 1 at Montello is for use by eastward trains only and

when necessary for westward trains to use track No. 1 permission must first be obtained from the train dispatcher.

When necessary to use siding at Little Mountain and letter "S" is not displayed, permission must first be obtained from train dispatcher.

S5787, S5915, S6052, S6095, S6602, S6639, S7652, S7695: train taking siding because of the S indication located at the above signals, if letter M cannot be illuminated and if no means of communication is available, train may proceed after complying with Rules 513 and

** Display of letter "M" for trains does not relieve conductors and engineers of compliance with RULE 513.

RULE 705. HOT BOX DETECTORS

Illum. Letter	On Signal	Approaching	Location of Readout
H	5787	Halleck	MP 576.4 Halleck
W	5829	Halleck	
H	6187	Moor	MP 616.2 Moor
W	6206	Holborn	010.2 11001
H	6224	Holborn	MP 625.4 Holborn
W/	6696	Toggmag	MP 644.7 Cobre
H	6658 *6758	Tecoma	MP 669.3 Tecoma Eastward Absolute
Н	6780	Lucin	Eastward Absolute Signal W.E. Lucin
m)	011		
Illum.			
Letter	Signal	Approaching	Location of Readout
н	Westward		
	Absolute Signal	Lucin	Westward Absolute
	E.E. Lucin		Signal W.E. Lucin
H	Westward		Westward Absolute
	Signal	3.0	
177	E.E. Lemay.		Signal W.E. Lemay
W	7044	Groome	
w	7063	Lemay	
		Groome	Eastward Absolute Signal E.E. Groome
	Westward Absolute	Strongknob	Westward Absolute
	Strongknob		Signal W.E. Strongkno
N	7314	Lakeside	
W	7327	Strongknob	
н	MP 733.4	Lakeside	Eastward Absolute Signal E.E. Lakeside Westward Absolute Signal W.E. Bridge
H	MP 754.2	Bridge	Westward Absolute
**	7000	T 3.	Signal W.E. Bridge
N	/628	Little Mountain.	MP 767.85 East End
		Little Mountain	Little Mountain
Scanner MP		ection	
MIL	Dir	ection	Location
47.1	West		Moleen
81.0	West		Halleck-Deeth
*599.0	West		Dooth
320.6	East a	nd West	Moor-Holborn
	East		Moor-Holborn Valley Pass-Cobre
541.6	West		Cobre
644.2	West .		Montello-Tecoma
644.2	East		
644.2	East		Tecoma
644.2 664.0 *665.8	East West .		Tecoma Lucin
644.2 664.0 *665.8	East West .		Tecoma Lucin
*664.0 *665.8 576.4 883.8	East West East West		Tecoma-Lucin
644.2 664.0 **665.8 676.4 683.8	EastWestEastWest	nd West	Tecoma-Lucin Lucin-Pigeon Lemay-Groome
644.2 664.0 *665.8 676.4 683.8 706.0	East	nd West	Tecoma-Lucin Lucin-Pigeon Lemay-Groome Strongknob-Lakeside
644.2 664.0 **665.8 676.4 683.8 706.0 731.8	East West East West East East a East a West	nd West	Tecoma-Lucin Lucin-Pigeon Lemay-Groome

Refer to Rule 705 All Subdivisions.

*When eastward train finds Signal 6758 displaying STOP indication and "W" letter type indicator not illuminated, member of train crew must contact train dispatcher before proceeding.

**Refer to Rule 705, All Subdivisions.

RULE 760. CENTRALIZED TRAFFIC CONTROL Limits extend from absolute signal MP 713.60 on WPRR main track and absolute signal MP 603.50 on SP main track and absolute signal MP 713.90 on WPRR main track and absolute signals MP 603.80 on SP eastward and westward main tracks. From end of double track at Moor to end of double track at Valley Pass and from west end eastward siding at Lucin to end of double track at Bridge.

At Alazon West switch of crossover between SP and WPRR main tracks is a spring switch and normal position is for SP main track.

When absolute signals display stop indication member of crew must contact train dispatcher for instructions. If signal can not be cleared train dispatcher may authorize member of crew to operate push buttons in box mounted on signal house north side SP track. Instructions are posted in box.

If absolute signal can not be cleared by operation of push buttons movement may be made as prescribed by Rule 776 and in addition eastward movement to WPRR may only be made as prescribed by

WPRR Rule 509(a).

Bottom unit of eastward three unit absolute signal located at end of double track Moor, MP 616.20 and bottom unit of westward three unit absolute signal located at end of double track Valley Pass, MP 641.60, govern movement on siding and will display lunar aspect only. When lunar aspect is displayed in this unit, train may proceed into siding at restricted speed without stopping, expecting to find siding occupied by a preceding train.

At Lucin trains moving against current of traffic finding absolute signal at west end westward siding displaying stop indication must obtain train dispatcher's permission to enter block and must

ascertain that spring switch is properly lined.

Reverse movement after trailing through spring switch east end eastward siding Lucin must not be made until train dispatcher's permission obtained and it is known that switch points have moved to proper position.

On double track between Lakeside and Tresend, train movements may be made in either direction on either track, being gov-

erned by absolute and automatic signals.

Absolute signal located south of No. 2 Track, MP 752.4, governs

eastward trains only.

Absolute signal located north of No. 2 Track (off trestle), MP 752.4, governs eastward trains on No. 2 Track only.

Two unit absolute dwarf signal installed north of No. 2 Track, MP 752.5, governs westward trains. Top unit governs movement of westward trains to fill on No. 2 Track. Bottom unit governs movement of westward trains to trestle on No. 2 Track.

Push buttons for clearing absolute signals actuated by dragging equipment detectors located on CTC house south of switch from east-

ward main Track to No. 2 Track at MP 752.50.

GENERAL REGULATIONS

RULE 812. Be governed by current timetable, bulletins and rules of WPRR, on WPRR track between Carlin and Alazon.

Members of crew making temporary repairs to hot bearings will be held personally responsible for control of burning waste to preclude possibility of starting fire on Salt Lake trestle.

At Ogden and Carlin when instructions require application of hand brakes on freight trains, outgoing crews must not release hand brakes until road engine is coupled.

RULE 872. Enginemen taking charge of engines at Ogden and Carlin will consider engines as having been amply supplied with fuel, water and sand.

AIR BRAKE RULES

PASSENGER TRAINS

Use of retaining valves is not required when dynamic brake is in operation and/or pressure maintaining system of braking is being used on descending grades Moor to Wells and Valley Pass to Montello.

FREIGHT AND MIXED TRAINS

Retaining valves must be used on descending grades as follows:

Moor to Wells, Valley Pass to Montello.

WITHOUT DYNAMIC BRAKE IN OPERATION:

One retaining valve for each 80 tons in train. If gross tonnage exceeds 80 tons per operative brake, retaining valves must be used on all cars and speed must not exceed 15 MPH.

WITH DYNAMIC BRAKE IN OPERATION:

Permissible Tons Per Unit Without Retaining Valves*

	Basic D		Exte	ake	
	4 Axle	6 Axle	4 Axle	6 Axle	8 Axle
With dynamic brake in operation but WITH- OUT pressure main- taining system of					
braking With dynamic brake in operation and WITH	525	775	650	950	1275
pressure maintaining system of braking	1800	2700	2300	3500	4600

¶Freight trains exceeding 7200 tons must not exceed 40 MPH between MP 645.4 and MP 654.0.

If permissible tonnage is exceeded, one retaining valve must be

used for each 150 tons in excess thereof.

Locomotive classes AF 628, AF 630, EF 425, EF 623, EF 625, EF 630, EF 636, GF 425 (except units 6700-6727); GF 628, GF 630, GF 633, EF 850B and GF 850 are equipped with extended range dynamic brake.

*If any unit having basic dynamic brake is operated with units having extended range dynamic brake, all units in consist must use tonnage authorized for units having basic dynamic brake.

Retaining valves may be turned up when stops are made at any

of the following stations:

Westward......Holborn or Moor Eastward......Moor, Holborn, Pequop, Valley Pass, Cobre

When retaining valves are used Valley Pass to Montello, stop for heat radiation need not be made if there is no indi-cation of wheels overheating and in the judgment of engineer and conductor it is safe to proceed.

Incoming engineer, after completing stop, Rule 24-B. Elko: must make a full service brake application leaving brakes applied. When outgoing crew takes charge of train on arrival or otherwise is assured, upon request, that continuity of brake pipe has not been disturbed, engineer will release brakes and proceed.

Will apply to eastward trains at Valley Pass and to westward trains at Moor when retaining valves are being used, except when cars are to be set out or picked up at Cobre eastward trains may pass Valley Pass without stopping for air brake test, provided test is made at Cobre.

To avoid additional stops at stations indicated above, trains may make inspection, air brake test and turn up retaining valves when

stops are made at the following stations:

Westward......Holborn or Moor Eastward......Moor, Holborn, Pequop or Valley Pass

Flashing light temperature indicators installed at Signals 6186 and 6381, between Moor and Valley Pass. When flashing on approach of train, will indicate that the temperature is below 32 degrees. When flashing, running test will be made. Engineer will inform

trainmen in caboose that running test is to be made after which trainmen will observe whether or not brakes apply on the caboose and brake pipe pressure is being properly restored and so inform engineer. If unable to obtain a proper air test while running, train must be stopped and air brake hoses on head end blown out as prescribed by Air Brake Rule 26.

Westward Freight Trains. Conductor must contact engineer when engine passes station one mile sign approaching Valley Pass, and comply with addition to Rule 25, under All Subdivisions.

Eastward Freight Trains. Conductor must contact engineer when engine passes station one mile sign approaching Moor and comply with addition to Rule 25, under All Subdivisions.

RULE 33. Restrictive grades are as follows:

Eastward	MP t	o MP	Speed-MPH
Cobre to East of Cobre	645.4	654.0	25
Tecoma to East of Tecoma Westward	670.0	675.0	25
Moor to Wells	616.3	607.8	25

SPECIAL INSTRUCTIONS — OGDEN SUBDIVISION

MISCELLANEOUS

Engines listed must not operate on tracks shown below:

Class of Engine	Restricted Tracks
All enginesLucin – Beyond en	gine restriction signs on South
All enginesElko – Vogeler Wh All enginesCarlin – Vogeler W Little Mountain – over track scale.	se. spur over track scale. hse. spur over track scale. Great Salt Lake Chemical spur

Load Limit (car and contents):

Carlin-Ogden......315,000 pounds

Unless authorized by Superintendent, heavier loads must not be handled.

29. SP and WPRR eastward trains will use WPRR track from Carlin to Alazon being governed by WPRR rules, timetable, special instructions and timetable bulletins.

SP and WPRR westward trains will use SP track from Alazon to Carlin being governed by SP rules, timetable, special instructions and timetable bulletins.

Current of traffic on SP track from Alazon to Carlin is westward and trains will operate under SP rules applicable to double track.

Movements against the current of traffic on SP track must not be made except under flag protection or as authorized by train order.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

MP	Location	Description
539.54	VivianTunnel No. 2	Overhead & side
542.45	VivianHumboldt River bridge No. 2	4Overhead & side
566.55	RyndonTunnel No. 3	Overhead & side
567.19	RyndonHumboldt River bridge No. 2	5Overhead & side
569.85	Ryndon Humboldt River bridge No. 2	7Overhead & side
570.36	Ryndon Humboldt River bridge No. 2	8Overhead & side
769.5	Little	
	Mountain Great Salt Lake Chemical	
	track scales	Overhead & side
778.51	Weber River bridge No. 2	Side
Salt La	ake Trestle (between Bridge and Tresend)	

SPECIAL INSTRUCTIONS - OGDEN SUBDIVISION

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in SPEED RESTRICTIONS FOR ENGINES appearing on pages 6 and 7, and MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT and OTHER MAXIMUM SPEEDS appearing on page 7 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE SAFETY,

REGARDLESS OF TIME.

TERRITORY		PASSEN- GER TRAINS	FREIGHT AND MIXED	TERRITORY	ASSEN- GER	FREIGHT AND	
MP	MP Column:	1	2	MP MP Column:	1	2	
WP 713. 603.75 to 607.10 to 608.63 to 616.23 to 616.25 to 616.84 to 635.77 to 645.02 to 653.04 to 660.00 to 672.00 to 679.56 to 739.70 to Lakeside overs, c 752.05 to 752.12 to	ARD, ALAZON TO ODGEN: 67 to 603.75 (through turnout) 6 607.10	40 70 50 40 25 50 60 70 70 70 70 60 35 60 70 30	40 60 50 40 25 50 60 60 45 45 50 60 60 60 60 60 60 60 60 60 15	WESTWARD, OGDEN TO CARLIN: 780.21 to 752.12	70 60 60 70 35 60 70 65 70 65 70 45 50 40 50 70 65 70 60 70 65 70 60 70 60 70 60 70 60 70 60 70 70 70 70 70 70 70 70 70 70 70 70 70	60 60 60 60 60 60 60 60 60 60 45 40 45 60 60 60 60 60 60 60 60 60 60 60 60 60	
	,F;==- j-:		*No. 2	ack (Great Salt Lake Trestle).			
739.70 to	east crossover Tresend	20 20 70	20 20 60	*753.67 to 753.62 (through crossover) 753.62 to 752.50	25 70 20 20	25 60 20 20	

★★All trains must not exceed speed of 20 MPH through turnout from eastward main track at MP 752.49.

Freight and mixed trains containing no restricted cars are authorized to operate at Column 1 speeds not exceeding 65 MPH under conditions specified in all Subdivisions, Page 8, Miscellaneous, Item No. 28.

Western Pacific Train WMX with no restricted cars, not more than 70 tons per operative brake or 70 cars, is permitted to operate at Column 1 speeds not exceeding 70 miles per hour on the Southern Pacific's portion of the paired track between Alazon and Weso.

Speed Restrictions on Sidings and Crossovers

Location	Speed	Location	Speed
Elko	15	Pigeon	25
Elburz (Crossover)		Jackson	25
Halleck		Lemay	
Deeth		Groome	
Wells	15	Hogup	
Moor	25	Strongknob	
Moor (Crossover)		Lakeside	
Holborn		Lakeside (Crossover)	35
Pequop		Tresend (East Crossov	ver)20
Valley Pass		Tresend (West Crossov	ver)35
Valley Pass (Crossover) .		Midlake (Track No. 1)	25
Loray (Crossover)		Bridge (East Crossove	
Lucin-North		Bridge (West Crossov	
Lucin-South	15	Little Mountain	10

Eastward trains after having been instructed to operate directly to D&RGW will enter connection through spring switch located just east of Signal P7802 and members of crew will hand throw switch and return switch to normal position after movement is completed.