

दक्षिण पश्चिम रेलवे
SOUTH WESTERN RAILWAY



सं/No. T.389/Safety Circular/5/23

क्षेत्रीय प्रधान कार्यालय
Zonal Headquarters Office,
संरक्षा विभाग, हुबल्लि,
Safety Department, Hubballi.
दिनांक / Dated :06.09.2023

To All Concerned/SWR

HQ Safety Circular No. 13

Sub: Power Block-reg.

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On 04.09.2023 it is reported that Power block was permitted between LKT-NGR in Hubli Division from 15.45 to 16.15 hrs for both UP/DN lines. Power block busted beyond permitted time. In the meantime, T.no 07336 with AC locos permitted to pass LKT at 16.54 hrs, in to the power block section which stopped at km 42/300 between LKT-NGR due to no power supply in OHE.

In this connection All concerned are requested to follow the GR & SRs 17.02 & 17.09 strictly during Power Block to prevent reoccurrence in future.
(Copy Enclosed for ready reference)

 06.09.2023

(पी.आर.सुधाकर / P. R. SUDHAKAR)

उप मुख्य संरक्षा अधिकारी (सि.व दू. सं.)/ Dy.CSO(S&T)

कृते प्रधान मुख्य संरक्षा अधिकारी/For Principal Chief Safety Officer

CHAPTER - XVII WORKING OF TRAINS ON ELECTRIFIED SECTIONS OF RAILWAYS

17.01 Applicability of General Rules :-

All rules referring to the working of trains shall also apply to electrified sections except as otherwise provided in the rules contained in this chapter.

17.02 Special definitions applicable to this Chapter :-

In these rules, unless the context otherwise requires, -

- (1) "*electrical way and works*" means the traction installations including overhead equipment and other connected works provided on the electrified sections of the Railway;
- (2) "*feeding post*" means a supply control post, where the incoming feeder lines from grid sub - station are terminated;
- (3) "*neutral section*" means a short section of insulated and dead overhead equipment which separates the areas fed by adjacent sub - stations or feeding posts;
- (4) "*Power Block*" means blocking of a section of line to electric traffic only;
- (5) "*supply control post*" means an assembly of interrupters, isolator switches, remote control equipment and other apparatus provided for controlling power supply to overhead equipment. It includes feeding posts, sectioning and paralleling posts, sub-sectioning and paralleling posts and sub - sectioning posts;
- (6) "*tower wagon*" means a self - propelled vehicle which is used for the maintenance and repairs of overhead equipment;
- (7) "*Traction Power Controller*" means a competent Railway servant who may for the time being be responsible for the control of power supply on the traction distribution system.

Note :- (1) "*Traction distribution official*" means an authorised official of the overhead equipment and/or power supply installation.

- (2) "*Traffic Block*" means line block.
- (3) "*Authority - to - work*" means an authority to work on overhead equipment given by a Traction distribution official who has obtained Power Block from Traction Power Controller, to another Traction distribution official.
- (4) "*Power Block*" as defined in G.R.17.02 (4) is usually accomplished by switching off power to the section concerned.
- (5) "*Supply control post*" as defined in G.R.17.02 (5) is also referred to as "*Switching station*".

- (6) **“Traction Power Controller” as defined in G.R. 17.02 (7) is abbreviated as “TPC”**
- (7) **“Traction Loco Controller” means a competent Railway official who is responsible for booking of electric locomotives and running staff to meet the requirements of traffic and maintenance. It is abbreviated as “TLC”**

S.R.17.02 (i) Unwired track :-

To distinguish unwired tracks taking “OFF” from wired tracks, Caution Boards as per figure (1) shall be provided at the first overhead equipment mast ahead of the point of take off. The driving crew of electric locos/Electric Multiple Units shall be alert and stop short in case they are erroneously signaled on to unwired track.

(ii) Electric traction limits : -

For tracks which are not equipped with overhead equipment i.e., unwired track, a special board shall be provided as per figure 2 ahead of the point of entry to the track. These should not be closer to the point than the overhead equipment structure ahead of it. No electric locomotive/Electric Multiple Unit shall normally be admitted into an unwired track. Any special movement of electric rolling stock on unwired track shall be done under competent written authority as provided for in Station Working Rules and such movement shall take place only with pantographs lowered and locked. In certain lines, partial wiring is provided for a portion of the length of the line. When entering such partial lines, the Loco Pilot of the electric locomotive/Electric Multiple Unit shall ensure that his locomotive/Electric Multiple Unit is stopped within the run of the overhead equipment well ahead of its end.

(iii) Overhead equipment power failure : -

(a) In the event of failure of overhead equipment power supply the TPC shall advise Controller that emergency feeding arrangement are being introduced, mentioning the selected stations on either side of the affected section as also the structure numbers at which Loco Pilots shall have to lower and raise pantographs. The TLC and Controller shall repeat this information to all loco sheds and Notice stations.

(b) The selected stations on either side of the affected section shall fulfil the following conditions :-

(i) They shall be situated at a distance sufficiently away from the feeding post overlap to enable the Loco Pilot to attain sufficient speed to negotiate, without stalling, the “lower” and “raise” pant zone at the feeding post overlap.

(ii) They should have been provided with signals which can be manually controlled by the Station Masters. The Divisional Electrical Engineer/Traction Distribution shall nominate the selected stations for every feeding post overlap and inform all concerned.

(c) The Controller shall also inform these two selected stations with exchange of Private Numbers to stop all trains immediately, instructing that, when permission is granted to resume traffic, all Loco Pilots entering the affected sections should be issued with Caution Orders to “lower” and “raise” pantographs at the specified structure numbers.

- (d) After this has been done, Controller shall inform the TPC that the Station Masters concerned have been instructed to issue Caution Orders. The TPC shall then take steps to introduce emergency feed and advise Controller with exchange of Private Numbers that traffic can be resumed.
- (e) During the period when emergency feed is arranged, the TPC shall inform the Controller of the likelihood of abnormal voltage drop, if any, and Controller shall regulate the traffic suitably in consultation with TPC.

S.R.17.02 (iv) Programmed Power Block :-

A weekly programme of Power Blocks for overhead equipment maintenance purposes shall be formulated by the Divisional Electrical Engineer/Traction Distribution in consultation with the Divisional Operations Manager. The Divisional Electrical Engineer/Traction Distribution shall circulate this weekly programme to all concerned furnishing full particulars. The concerned overhead equipment official shall request the TPC for Power Block in accordance with the weekly programme furnishing the following particulars -

- (a) the section and location at which the work will be undertaken;
- (b) the nature of work proposed to be done; and
- (c) the time and the probable duration of the Power Block.

The TPC shall request Controller for the proposed programmed Power Block in Form ETR.1. After having ensured that there is no train in the concerned section, Controller shall inform the Station Masters at either end, with exchange of Private Numbers, that Power Block is being imposed, furnishing the duration of Power Block; the elementary section/sections in which the Power Block is being imposed; and the kilometrage at which the work is being undertaken. The Station Masters concerned shall immediately take protective measures in accordance with the Station Working Rules. The Controller shall then inform the TPC that Power Block may be imposed with due exchange of message in Form ETR.1. The TPC shall then switch off power to the section concerned and grant the Power Block to the authorised overhead equipment official in Form ETR.2. During the period of Power Block, steam/diesel locomotives may be permitted to enter the section provided that Caution Orders are issued to the Loco Pilots at Notice station/stations concerned that overhead equipment staff are working on line, furnishing the specified kilometrage, and also indicating that the driving crew shall exercise caution when passing over that section and obey all signals at the place of work. After completion of the work, the authorised overhead equipment officials shall ensure that everything is in order, remove the temporary earths and then inform the TPC of cancellation of the Power Block in Form ETR. 2. The TPC shall then energise the section and inform Controller of cancellation of Power Block in Form ETR. 1, who shall, in turn, inform the Station Masters concerned with exchange of Private Numbers. The TPC shall also inform the concerned overhead equipment official that the section has been energized and this official shall remain at the work-spot until this confirmation has been received.

S.R.17.02 (v) Emergency Power Block :-

On receipt of first information of any unusual occurrence on overhead equipment or accident, the TPC shall depending upon the merits of the case, immediately arrange to switch off power to the affected section. The TPC shall advise Controller who shall also immediately, in turn, advise the Station Masters concerned with exchange of Private Numbers to take protective measures as per Station Working Rules. An overhead equipment official of rank not less than that of a skilled artisan shall first inspect the actual site of unusual occurrences or accident and then request the TPC for an emergency Power Block, furnishing the following particulars -

- (a) the nature of defect;
- (b) the section and location at which the work has to be done;
- (c) the nature of work that has to be done;
- (d) the probable duration of the work; and
- (e) whether trains, other than those hauled by electric locomotive can be permitted to enter into the section.

In case the TPC has already switched off power, emergency Power Block shall be granted immediately to the overhead equipment official concerned in Form ETR 2. In case the TPC has not switched off power, emergency Power Block shall be granted in Form ETR. 2, only after the procedure as laid down in S.R.17.02(iv) has been complied with except that the TPC shall not wait for the clearance of all trains from the affected section prior to granting of the emergency Power Block. Under conditions of emergency Power Block, Controller/Station Master concerned shall not permit movement of non - electric trains except with the prior concurrence of the TPC. Such concurrence shall be recorded both at the Control office and in the TPC Log Book.

If the nature of incident is such that no trains can be run in the affected section, the TPC shall also arrange for a Traffic Block in accordance with S.R.17.09 (iv). If trains other than electrically hauled trains can be run, the procedure for running of these trains shall be in accordance with S.R.17.02 (iv). After the work has been completed, the emergency Power Block Shall be cancelled by the TPC in accordance with the procedure for canceling programmed Power Block as laid down in S.R.17.02 (iv).

- (vi) Communication between overhead equipment Official and TPC during Power Block :- The overhead equipment official requesting for Power Block from the TPC shall ensure that a Railway servant is specifically deputed with telephone to be in constant contact with the TPC from the time that such a request has been made till confirmation of re-energisation is received from the TPC.

- (vii) Emergency Power Block for Electric Loco Pilots : -

The Loco Pilot of an electric loco shall obtain emergency Power Block from TPC for the purpose of inspecting and securing, if necessary, roof equipment, including pantograph. On receipt of request from the Loco Pilot for emergency Power Block, the TPC shall immediately arrange to cut off supply to the affected section, informing simultaneously Controller of the concerned section in Form ETR. 1. The Controller, in turn, shall inform the Station Masters concerned to take protective measures in accordance with the Station Working Rules.

After TPC has assured himself that this information has been transmitted by due exchange of Private Numbers with Controller concerned, he shall grant emergency Power Block to the Loco Pilot duly exchanging Private Numbers with him. After the Loco Pilot has completed his work, he shall ensure that everything is in order, remove the temporary earths and then issue a message to the TPC supported by a Private Number to energise the line. The TPC shall then energise the concerned section and inform the Loco Pilot and Controller in Form ETR.1. The Controller shall inform the Station Master concerned with exchange of Private Numbers that the emergency Power Block has been cancelled.

S.R.17.02(viii) Local Power Block :-

Power supply for sidings which do not affected movement of trains on the main line/loop lines shall be isolated manually by the authorized overhead equipment official when required after informing the TPC that such a shut - down is being effected an after exchange of Form ETR 4 between the authorized overhead equipment official and the Station Master/Cabin Station Master/Engine Turner/Yard Master/Shunter concerned. Necessary precautions as laid down in the Station Working Rules shall be followed during the period of local Power Block. After the work has been completed, the overhead equipment official shall reenergize the line and inform the Station Master/Cabin Station Master/Engine Turner/YardMaster/Shunter concerned inform ETR.4.Theoverhead equipment official shall also inform the TPC that the work has been completed and the line reenergized.

(ix) Intimation by TPC to overhead equipment officials regarding adjacent Power Blocks :- Whenever Power Blocks of any type are issued by TPC in Form ETR.2 to the authorized overhead equipment official, he shall clearly indicate therein full particulars of Power Block/Blocks which has/have been granted/are likely to be granted as also the names of the overhead equipment officials to whom such Power Blocks have been granted/are likely to be granted in the adjacent sections. If no Power Blocks has been granted/is likely to be granted in the adjacent sections, this shall be specifically mentioned in Form ETR.2.

(x) Cancellation of Power Blocks :-

When more than tone section is under Power Block at any time, the TPC shall energies each section only when the authorized overhead equipment official concerned who has taken the Power Block for that section cancels his Power Block in Form ETR 2.

(xi) Cancellation of simultaneous Power Blocks in adjacent sections when all communications have failed :-

When all means of communications with the TPC have failed and when Power Blocks are required to be cancelled, the senior most overhead equipment official, to whom the Power Block was issued, shall take steps to locally arrange for restoration of normal (live) conditions on the portion of the traction equipment specified in Form ETR 2. He shall then proceed to the next section and after exchanging messages with the overhead equipment official in charge of the next section that all men and material have been removed and everything is all right, he shall take steps to locally restore normal (live) conditions on that section also. After all sections have been energized, the senior most overhead equipment official Shall advise in writing the Station Masters concerned that all Power Blocks have been cancelled.

The senior most overhead equipment official shall be solely responsible for local energisation and cancellation of simultaneous Power Blocks in adjacent sections when all means of communications with the TPC have failed.

S.R.17.02(xii) Maintenance of Power Block registers by Station Masters :-

Each station shall be provided with a separate "Power Block" register. All messages relating to the imposition/cancellation of any type of Power Block shall be entered in red ink by the Station Master concerned in this register furnishing full particulars of time, Private Numbers etc.

(xiii) Maintenance and issue of keys of isolator switches and switching posts by Station Masters :-

Duplicate keys for all isolator switches and switching posts shall be kept in separate locked glass fronted boxes in the custody of Station Master/Cabin Assistant Station Master or any other authorized person stationed conveniently near the switches/switching posts. These keys shall be issued on demand in emergencies only to the authorized overhead equipment officials, whose signatures for the receipt of such keys thus taken by the overhead equipment official shall be returned to the station staff after the work has been completed, necessary entries to the effect being made in the relevant registers. The Station Master shall hand over duplicate keys of the isolator switches and switching posts to the authorized overhead equipment officials only after obtaining permission from the TPC. A list of authorized overhead equipment officials who can withdraw the duplicate keys from the Station Master should be displayed at each station. This list should be duly signed by an officer of the traction distribution department.

(xiv) Operation of Isolator switches by Station Master :-

In case of emergencies, Station Master/Cabin Station Master shall operate such isolator switches, as may be necessary, under the specific instructions of the TPC after exchange of Private Numbers. A record of each such operation carried out shall be maintained by the TPC as well as by the Station Master/Cabin Station Master in the Power Block register.

(xv) Multiple Traction Distribution working parties in the same section :-

Whenever more than one traction distribution official requests the TPC for Power Block in the same section, the TPC shall grant the Power Block to only one official in Form ETR.2. The traction distribution official selected by TPC for the grant of Power Block shall be the one who has requested for the Power Block for the longest duration. The TPC shall advise this traction distribution official the names and particulars of other traction distribution officials who have also requested for Power Block in the same section. The TPC shall also inform the other traction distribution officials concerned who have asked for Power Block the same and full particulars of the traction distribution official, to whom he proposes to grant the Power Block. The traction distribution official to whom the Power Block has been granted by the TPC shall exchange Private Numbers with the other traction distribution officials Private Numbers, duly advising the time by the Power Block is proposed to be cancelled. This traction distribution official shall inform the TPC full particulars of the "Authority - to - work" granted by him in the same section, in Form ETR.2. Each traction distribution official who has been given "Authority - to - work" shall be responsible for making his own earthing arrangements

and taking all other precautions necessary. After each traction distribution official has completed his work, he shall remove the temporary earths, ensure that everything is in order and then only shall he cancel the "Authority - to - work" to the traction distribution official to whom the Power Block was granted with exchange of Private Numbers. The traction distribution official to whom the Power Block, was granted shall cancel the Power Block only after having ensured that all other traction distribution officials have completed their work.

17.03 Inspection of electrical way and works :-

The electrical way and works shall be inspected regularly in accordance with special instructions by officials nominated for the purpose and in accordance with the duties assigned to them.

S.R.17.03 (i) Periodic inspection of overhead equipment :-

The overhead equipment shall be regularly inspected by staff during foot patrol. The frequency of patrolling shall be so arranged as to cover the entire suburban section every day and the entire non - suburban section twice a week. The persons in - charge of each group or gang of foot patrol on duty shall be not below the rank of a skilled artisan.

(ii) Equipment to be carried by the Linesman on patrolling duty :-

A Linesman on patrolling duty shall carry with him the following equipment -

- (a) one Red and one Green hand signal flag;
- (b) a box containing 10 detonators;
- (c) a set of spanners; and
- (d) a portable telephone.

(iii) Periodic Testing of Emergency telephone Sockets :-

The emergency telephone sockets shall be tested by the patrolling Linesman every week. A record of such testing shall be maintained by the TPC in a separate register for this purpose.

(iv) Periodic Maintenance Schedules of the overhead equipment:-

Periodic maintenance schedules of the overhead equipment such as POH; IOH;PM (Periodical Measurements); CG(Contact wire Greasing); PMW (Preventive Maintenance Work); RTW (Re - Tensioning Work); Pre - monsoon precautions; TWI(Tower Wagon Inspection) shall be carried out by traction distribution staff strictly in accordance with the schedules and periodicity laid down by special instructions. A weekly programme of Power Blocks referred to in S.R.17.02 (iv) shall be prepared to comply with the above schedules and Power Blocks shall be granted in order to ensure that these schedules are carried out in time.

17.09 Additional rules for electrified sections :-

Special instructions for working of trains on electrified section shall be notified by authorized officer.

S.R.17.09 (i) Duty of the Railway officials to report abnormalities in overhead equipment :-

It is the duty of every Railway official who notices any abnormalities on the overhead equipment, to inform the TPC either directly or through any Station Master or through the nearest Railway telephone regarding the nature of the defect abnormality noticed by him. The person conveying such information to TPC shall not leave the vicinity of the telephone without TPC's permission since the latter may want to contact him again to elicit further information.

(ii) Duty of driving crew to report abnormalities in overhead equipment :-

The driving crew of all trains shall keep a sharp look - out and report any defects in overhead equipment noticed by them to the TPC from the nearest station.

(iii) Duty of Station Masters to report abnormalities in overhead equipment :-

The Station Master receiving first information report of any unusual occurrence on the overhead equipment shall immediately report the same to the TPC and to Controller and shall assist the TPC to quickly isolate the faulty section.

(iv) Emergency traffic block :-

Whenever a line is required to be blocked against the movement of all traffic whether steam, electric or diesel, due to defects in overhead equipment, such emergency traffic block shall be granted by Controller on a request from the TPC/TRD Official. This emergency traffic block shall be granted in addition to the emergency Power Block referred to in S.R. 17.02 (v).

(v) Special Instruction regarding Line Block on the suburban Double Line electrified section :-

(1) Requisition for Line Block -

- (a) When it is necessary to obstruct totally both the Up and Down suburban electrified lines for engineering purposes, the Assistant Divisional Engineer or Permanent Way Inspector must apply to the Division Railway Manager for the Line Block order with copy to the Chief Controller. Line Block need not be imposed for minor works, such as removing or replacing a rail, which must be done under the protection of the prescribed rules.

Note :- When only one line on the double line is or is to be obstructed, trains shall be worked in accordance with S.R. 9.12 (iii).

- (b) Line Block must always be applied for and imposed between any two of the stations nominated by the Divisional Railway Manager. Such nominated stations shall necessarily be equipped with Semi - Automatic/Manual Stop signals.

- (c) The time for blocking the line must be arranged so as to interfere as little as possible with the train services. Not less than twenty - four hours notice must be given to the Divisional Railway Manager that Line Block is required, and the application must be in the following form from which no deviation whatsoever is authorized :-

Please Block double line section between..... (Station) and
 (Station) from after Train No Clears the section
 until.....hours

Note :- Applications for more than one Line Block period falling on the same date and between the same stations may be consolidated in one letter, provided the standard form application laid down above is repeated for each of the Line Block periods applied for.

S.R.17.09 (v) (2) Instructions to staff :-

- (a) The Divisional Railway Manager must issue orders to the Station Master of the Stations at either end of the section on which the double line is to be blocked with copy to -
 - (i) The Station Masters of intermediate stations on the section on which the double line is to be blocked.
 - (ii) The Station Masters of train starting stations.
 - (iii) Chief Controller.
 - (iv) The Engineering, Signalling and Electrical Official concerned.
- (b) The Divisional Railway Manager must be equally precise in his orders, which must be issued by letter, as required, in the following form, from which no deviation whatsoever is authorized :-

From: DRM/.....
 To: SMs.....and.....Block double line
 section between yours and.....station from after Train
 No.....clears the section yours and.....station from after
 Train No.....clears the section
 until.....hours on.....(date) for engineering purposes.
 Copy : PWI or AEN (as the case may be) SMs. of the notified stations. CHC,

Note :- Line block orders with regard to more than one Line Block period falling on the same dated and between the same stations may be consolidated in one letter as required, provided the standard form (so far as the body of the order is concerned) laid down above is repeated for each of the Line Block periods ordered.

- (c) The Officials noted in paragraph S.R. 17.09 (v) (2) (a) must immediately acknowledge the order in the following form by letter to the Divisional Railway Manager with copy to :-
 - (i) The Station Masters at either end of the section on which the double line is to be blocked.

(ii) Chief Controller and the Engineering official concerned.

I note double line section between (Station) and
 (Station) must be blocked from after Train No Clears the section
 until hours
 Copy - PWI or AEN (as the case may be), SMs of the two stations between
 which the line is blocked and CHC

* Acknowledgement copy to the individual official is not necessary when he himself issues the message.

SR 17.09(v) (3) Action taken by staff :-

- (a) (i) When an order is received from the Divisional Railway Manager, that a double line section is to be blocked, this order must be copied in red ink, in bold hand-writing across each page in the Station Dairy at stations and signal cabins and across each sheet of the log maintained in the Control Office day - by - day until the line Block actually takes effect i.e. upto and until the last train has cleared the double line section before it is blocked for the Engineering purposes.
- (ii) A copy of the message must be secured on the signal lever handle of the signal which controls the entrance of trains into the double line section to be blocked at the stations at either end of the double line section.
- (b) (i) Before the train mention in the Line Block order is allowed to enter the double line section to be blocked, it must be ensured that there is no train
 - (1) Either on the other line of the double line section to be blocked.
 - (2) Or at the station at the other end of the double line section waiting to enter the section prior to the arrival of the train mentioned in the Line Block order. The Station Master at both ends of the double line section to be blocked are jointly responsible for ensuring this.
- (ii) The Chief Controller/traction controller must take care that no goods or extra train is ordered whose running would be affected by the Line Block and must take all possible steps to ensure that the Line Block can commence at the time applied for and that no undue delay takes place owing to the late running of suburban trains.
- (c) (i) The Guard of the last train entering the section before it is to be obstructed must be furnished by the Station Master with necessary copies of a certified (which need not be addressed to any one) in the following form :-

"The double line section between
 (Station).....and.....(Station) will be blocked for
 engineering purposes from after Train No.....clears the section

Date.....

(Station Master)



The Station Master must hand over a Caution Order to the Loco Pilot warning him that he should be on the look-out for a hand danger signal from the engineering official - in - charge, vide clause (iii) below. If the last train is a run through train, it must be stopped out of course at the station. Immediately before authorizing the train to leave the station, the Station Master must advise by telephone the Station Master at the other end of the double line section to be blocked who must at once acknowledge the advice and place the "Line Block" collar on the signal lever handle of the signal, which controls the entrance into the double line section to be blocked, and this collar must not be removed until a traffic train is ready to enter the section under the provisions of S.R. 17.09 (v) (6).

- (ii) Immediately on the train leaving the station, the Station Master must place the "Line Block" collar on the signal lever handle of the signal, which controls the entrance into the double line section to be blocked, and this collar must not be removed until a traffic train is ready to enter the section under the provisions of S.R. 17.09 (v) (6).
- (iii) The last train must, in any case, be stopped at the site of the work by the engineering official - in - charge by the exhibition of a hand danger signal. The Guard must also be on the look - out and, on the train being stopped, deliver a copy of the certificate to the official - in - charge and obtain a receipt. Copies of the certificate must also be delivered by the Guard to the Station Masters of intermediate stations and receipts obtained. Run through trains must be stopped out of course for the purpose.

Note :- If, on the train coming to a stand at the site of the work, the Guard is not in possession of the certificate, the engineering official-in-charge must issue a message through the Guard, to the Station Masters at both end of the double line section to be blocked, with copy to the Divisional Railway Manager and the Chief Controller intimating the fact that the work is being proceeded with as arranged. Immediately on arrival at the station ahead, the Guard must hand over the message to the Station Master and obtain a receipt. The Station Master must immediately communicate the message to the Station Master at the other end and obtain his acknowledgment and also advise the Divisional Railway Manager and the Chief Controller by telephone.

- (iv) The last copy must be delivered by the Guard to the Station Master at the other end of the double line section to be blocked and a receipt obtained, the train being stopped out of course for this purpose, if booked to run through.
- (v) Line block must not be considered to be in operation, nor must the work of obstructing the line be commenced, until the official - in - charge at the site of the work is in possession of the copy of the certificate referred to in clause (iii) above or has issued the message referred to in the note under clause (iii) above.
- (vi) Until the time specified, in the Line Block order, for the obstruction to be removed, the Station Masters of the Stations at both ends of the double line section must not allow the signal levers controlling the entrance into the section, to be operated, nor must they allow any train to enter the section, except as provided for in S.R. 17.09 (v) (4).

SR. 17.09 (v) (4) Entry of trains into the Obstructed Double Line Section :-

- (a) While the Line Block is in force, no traffic train must be allowed to enter the obstructed section in any circumstances whatsoever.
- (b) Engineering material trains may be allowed into the obstructed section on the responsibility of the Engineering official - in - charge, provided that this official is not lower in rank than a Permanent Way Inspector, Grade III. Before taking any Engineering material train into the obstructed section, the Engineering official-in-charge must give the Guard of such train the following written authority :-

"You are authorized to take your train into the obstructed double line section between.....(Station) and(station) on(date) between.....(Station) and(station) on(date) at..... hours. The section must be cleared before hours.....minutes. The line is obstructed from kilometers.....to kilometers..... for engineering purposes, and the working of the Automatic Block System and the signals relating there to is to be treated as suspended."

- (c) (i) Before he takes his train into the obstructed Section, the Guard must hand over this voucher to the Station Master and obtain from him in return a certificate in following terms:-

"I note you are authorized by the Engineering Branch to take your train into the obstructed Double Line section between (Station).....and (Station).....on (date) at hours.....and that the line is obstructed from kilometres.....to kilometres.....for engineering purposes and the working of the Automatic Block System and the signal relating thereto is to be treated as suspended."

- (ii) If this certificate has been handed over to the Guard directly, the Station Master must send the following telephone message to the Station Master at the other end of the obstructed section:-
"Engineering material train entering double line section obstructed for engineering purposes. Give Private Number"
- (iii) The Station Master at the other end of the obstructed section on receiving this message must give a Private Number from his Private Number book and acknowledge the message as follows:-

"I understand Engineering material train entering double line section obstructed for engineering purposes. Private Number....."

(iv) Similar message must be exchanged and a Private Number allotted to each Engineering material train which enters the obstructed section.

(d) The Loco Pilot of a Engineering material train must enter the obstructed section on the authority of an "Authority to Proceed without Line Clear" and work his train in accordance with S.R. 15.06 (iii). The following must be entered on the "Authority to proceed without Line Clear" :-

- (i) the Private Number relating to the train, and
- (ii) a remark to the effect that the working of the Automatic Block System and the signal relating thereto is to be treated as suspended.

(e) Lorries may be allowed to enter into the obstructed section, provided they are treated in the same way as ballast or Engineering material trains, except that the duties of both the Guard and the Loco Pilot of the ballast or Engineering material train must devolve on the person in - charge of the lorry.

SR. 17.09 (v) (5) Use of emergency crossovers in obstructed section :- On the responsibility of, and in accordance with instructions issued by the Engineering official - in - charge, the emergency crossovers at intermediate stations in a section obstructed for engineering purposes may be utilized for working Engineering material trains from one line to the other.

SR. 17.09 (v) (6) Resumption of normal working:-

(a) The running of traffic trains over the section obstructed for engineering purposes, must not be resumed until all engineering material trains have cleared the obstructed section and the following messages have been exchanged between the Station Master at either end of the obstructed section :-

My/Your Private Number.....Engineering materials train cleared, double line section here at.....hours.....minutes.

My/Your Private Number.....Understand Engineering material train cleared, double line section at yours at.....hours.....minutes.

These messages must be exchanged for each Engineering material train that entered and cleared the obstructed section.

(b) Provided that the above messages have been exchanged for each Engineering material train that has entered and cleared the obstructed section, the running of traffic trains over the section ordered to be obstructed may be resumed on expiry of the Line Block period unless the Engineering official - in - charge of the work specifically notifies that the obstruction has not been removed. A Caution Order, warning Loco Pilots that they must be prepared for Danger or Caution signals, must be handed over to all Loco Pilots of trains entering the section until the Station Master has received either a written notice from the Engineering Official - in - charge of the work that the obstruction has been removed or an advice communicating this written notice, from the Station Master at the other end of the section. The Station Master, receiving the written notice, must immediately communicate it to the Station Master at the other end of the section.

(c) The running of Traffic trains over the section ordered to be obstructed may be resumed before expiry of the obstruction period specified in the Line Block order provided that -

- (i) The Engineering official - in - charge of the work notifies the Station Master at one end of the section, in writing that the obstruction has been removed.
- (ii) The Station Master receiving the written notice from the Engineering official - in - charge of the work has communicated the notice to the Station Master at the other end of the section, the officials noted in S.R. 17.09 (v) (2) (a) the Divisional Railway Manager - (the notice must be communicated through telephone) and
- (iii) The provisions of S.R. 17.09 (v) (6) (a) have been complied with.

Note :- The notice referred to above must be recorded in the Station Diaries of all the stations on the obstructed section and in the log sheets of the Control Office.

SR. 17.09 (v) (7) Extension of Line Block period :-

- (a) If the Line Block is, on the notification of the Engineering official - in - charge of the work, extended beyond that time stated in the original Line Block order, the Station Master, who receives the advice notifying extension of the time from the Engineering official - in - charge, must advise the Station Master at the other end of the obstructed section, the officials noted in S.R. 17.09 (v) (2) (a) and also the Division Railway Manager by through telephone of the revised time upto which the Line Block has been extended by the Engineering Branch.
- (b) The advice extending the time of Line Block received from the Engineering official - in - charge of the work must be recorded in the Station Diaries of all the Stations, on the obstructed section, and in the log sheets of the Control Office. At the expiry of the extended time Traffic trains may resume running over the section as provided for in S.R. 17.09 (v) (6).

SR. 17.09 (vi) Immediate action for safety of moving trains in case of OHE break down :-

In the event of Traction Power Controller isolating a faulty section of Overhead Equipments, Caution Order shall be issued to look out for overhead Equipment defects and for any obstruction etc. on the track in the following manner -

- (1) Traction Power Controller shall inform the Section Controller of the isolated faulty section to enable him to check the movement of trains on adjacent tracks.
- (2) The Section controller shall immediately inform the Station Master to stop, if necessary, the first train entering the other line in the relevant section and issue a Caution Order to the Loco Pilot to observe a speed restriction of 20 KMPH by day and 10 kmph by night and to keep a sharp look out for any defects/obstructions on the line/lines.
- (3) The Caution Order should instruct the Loco Pilot to stop short of obstruction or at the next station and report the condition of the track and overhead Equipments or any other infringement to the Section Controller/Traction Power Controller and advice whether the following trains should observe any caution or speed restrictions.

- (4) The Section Controller, on receipt of this information from the Station Master or Loco Pilot, should immediately intimate the Traction Power Controller to take suitable action to continue or switch off power in the affected section.

SR. 17.09 (vii) (1) (i) Whenever station staff notice a train worked by an electric engine passing with hot axle/any wagon/coach running in dangerous condition or smoke/fire emanating from a wagon/coach or with any other abnormality in the running train which is likely to endanger safety of the train/passengers, the Switchman/Station Master shall immediately take steps to stop the train. In case they fail to stop such train by normal means as laid in Rule 4.42 then, they shall immediately inform the Traction Power Controller either directly or through the Section Controller to switch off the power supply of the OHE of the affected section under exchange of Private Number, in case TPC has been directly informed, Section Controller has also to be informed subsequently.

- (ii) Whenever any train gets held up for more than 3 minutes in the block section on account of no traction, the Loco Pilot of the train shall depute his Assistant Loco Pilot to check the train in order to look for any abnormality, and to advise the Guard shall then check the entire train.

If in the meantime, power supply is restored, the Loco Pilot shall call back his Assistant Loco Pilot to the locomotive and resume journey.

Otherwise, after the train is checked, the Loco Pilot/Guard shall inform the Section Controller/Traction Power Controller of the details of abnormality, if any, or otherwise, and assistance required, through the nearest emergency telephone circuit/by other available means.

Further, the Loco Pilot and Guard shall arrange protection of the line affected in accordance with GR.6.03 which deals with the protection of trains stopped between stations. In case of automatic territory, the lines must be protected in accordance with GR.9.10.

After ascertaining from the affected train of the nature of abnormality, decision regarding recharging of the OHE shall be taken by the Section Controller in consultation with Deputy Chief Controller, Guard, Assistant Loco Pilot and concerned Station Master shall be advised accordingly. Necessary steps shall be taken by Deputy Chief Controller, thereafter, for clearance of the abnormality.

- (iii) Restoration of OHE supply will be undertaken by Traction Power Controller only on the advice of the Section Controller under exchange of Private Numbers.

(2) If the switching off of the OHE takes place at a graded section and there is a chance that the train may start rolling back, then the staff should also follow the instructions laid down vide SR.6.05 (i) to avoid rolling down of train. In addition, the train brake must also be applied along with the locomotive brake in all such case.