



**WORK STUDY TO REVIEW THE
OPERATING STAFF STRENGTH AT
TI/TVR SECTION –
TIRUCHCHIRAPPALLI DIVISION**



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SOUTHERN RAILWAY

PLANNING BRANCH

G.275/WSSR- 621920/2019-20

WORK STUDY TO REVIEW THE
OPERATING STAFF STRENGTH AT
TI/TIRUVARUR SECTION –
TIRUCHCHIRAPPALLI DIVISION

STUDIED BY

WORK STUDY TEAM
OF
PLANNING BRANCH

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(i)

ACKNOWLEDGEMENT

The work study team acknowledges the co-ordination extended by DOM/GL/TPJ, TI/TVR and other SMs of this section in conducting the study.

(ii)

AUTHORITY

Annual Programme of work studies approved by SDGM for the year 2019-20.

(iii)

TERMS OF REFERENCE

Work study to review the Operating Staff strength in TI/TVR Section – Tiruchchirappalli Division.

(iv)

METHODOLOGY

The work study team has applied the following methodologies in conducting the work study.

- (1) Collection of Data
- (2) Observation of working procedure and deployment of staff.
- (3) Reassessed the manpower requirement based on the present workload duly applying HOER, SWR and also on need base.
- (4) Discussion with Traffic Inspector/TVR and Station Masters of this section.

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SUMMARY OF RECOMMENDATION**Revised Recommendation:**

1 post of SS with Grade Pay Rs.4600/- in Level-7 and 1 post SM with Grade Pay Rs.4200 in Level-6 are found excess to the requirement at TI/TVR section, the same may be surrendered and credited to the Vacancy Bank.

(2 posts)

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CHAPTER – I

1.0 INTRODUCTION

- 1.1 Indian Railways is the biggest transportation service industry owned by the Government of India. One of our Mission Statements is to achieve maximum “Economy in operations” and maximize “Railway earnings” by reducing the cost of operations in a planned and objective manner and optimum utilization of human resources.
- 1.2 Southern Railway was formed on 14th April 1951 merging the Railway Systems administered by Madras and Southern Maratha, South Indian and Mysore State Railways. The present Southern Railway has 4994 route kilometers approximately. It has six divisions namely Chennai, Madurai, Tiruchchirappalli, Thiruvananthapuram, Palakkad and Salem. The Zonal Railway headquarters is at Park Town, Chennai-600 003.
- 1.3 The Tiruchchirappalli junction is one of the Class - A Railway station in Southern Railway. The station is the Headquarters of Tiruchchirappalli Division having official code as TPJ. Tiruchchirappalli is bounded on the North by the districts of Perambalur, Thanjavur on the east, Dindigul on the south and Karur on the west. Tiruchchirappalli lies on the flat and fertile plains of the river Kaveri. The city built around Sri Rangam Perumal Temple, Rock Fort Uchipillayar Temple, Samayapuram Mariammam Temple etc., and is also calling as Rock Fort City. This was the Headquarters of old South Indian Railway (SIR).
- 1.4 TPJ Division is one of the six divisions in Southern Railway and is more or less geographically situated in the middle of Tamil Nadu at a distance of 336 Kms. away from the headquarters of Southern Railway i.e., Chennai. Tiruchchirappalli is one of the six divisions of Southern Railway located at a distance of 340 km from Southern Railway Headquarters having a route kilometerage of 918 BG and 112 MG (Closed for conversion) and the total route kilometers is 1030, whereas the total running track kilometers is 1258 as on 01.04.2018.
- 1.5 It is one of the 6 major divisions of Indian Railways. Tiruchchirappalli station became operational in the year 1859 by constructing the first line to Nagapattinam by the erstwhile Railway company named Great Southern of

India. After the inclusion of Trichy in the Railway Map it has become one of the most important junctions in Indian Railways. TPJ division serves the state of Tamil Nadu and Union Territory of Puducherry.

The Tiruchchirappalli division comprises of the following operating sections.

- VM-TPJ (Chord Line Section)
- VM-MV Main Line Section
- TPJ-TJ-MV Section
- VM-PDY Section
- VRI-CUPJ Section
- TJ-KIK Section
- MV-TVR Section
- NGT-VLNK Section
- NMJ-MQ Section
- VM-KPD Section
- TVR-KKDI and TTP-AGX Section

1.6 The TI/TVR section was Broad Gauge, Single line Non-electrified one of Southern Railway and as on date 24 Passenger Trains, 14 Weekly Express (per week) and 12 Goods Trains per day of trains are operated in this section. Around 10 shunting movements per day an average.

1.7 The study pertains to the staff working under TI/TVR, confined to Block stations on either end from Thiruvarur Junction (TVR), Kizhvellur (KVL), Nagapattinam Junction (NGT), Velankanni (VLNK), Nagore (NCR), Karaikal (KIK), Nannilam (NNM) and Peralam (PEM) station. The stations under TI/TVR Section comes under three Operating Sections viz., TJ-KIK, MV-TVR & NGT-VLNK.

1.8 **Role and objectives of the Transportation Department:**

The role of the Transportation Department is to provide transportation efficiently by making best utilisation of resources such as locomotives, coaches, wagons, track, signalling and communication equipments, fuel, electricity and staff.

1.9 **Passenger operation:**

- (a) Proper Time Tabling of passenger carrying trains.
- (b) Ensuring punctuality of trains.
- (c) Providing adequate number of passenger trains and accommodation as per requirement of traffic.
- (d) Optimising utilization of coaching stock and locomotives
- (e) Ensuring safety of passengers.

1.10 **Goods Operation:**

- (a) Prompt and regular supply of wagons as required by trade and industry and maximising loading.
- (b) Quick and assured transit of goods
- (c) Optimising utilisation wagons and locomotives
- (d) Safe transit of goods.

1.11 **Organisation of the Transportation Department:**

Member, Traffic in the Railway Board is the head of Transportation and Commercial Departments of the Indian Railways. He is assisted by Additional Members, Executive Directors and other junior officers in the Board. He deals with policy matters and overall co-ordinating and control of operation on the Zonal Railways.

Principal Chief Operating Manager (PCOM) is the head of the Transportation Department at the Zonal level. He is assisted by Chief Freight Traffic Managers (CFTMs), Chief Passenger Traffic level (CPTM). Chief Traffic Planning Manager (CTPM), Chief Motive Power Engineer, Running & Loco (CMPE R&L), Principal Chief Safety Officer (CSO) reports directly to the General Manager.

At Divisional level Senior Divisional Operating Manager (Sr.DOM) is the head of Transportation Department. He is assisted by DOM/AOMs, Control Organisation and Movement Inspectors. Safety aspect is co-ordinated by the Sr.DSO who is assisted by DSO, Safety Counsellors and Transportation Inspectors. The Field Organisation includes Station Masters / Assistant

Station Masters, Cabin ASMs, Switchmen, Leverman, Pointsmen etc. at Stations and Area Managers, Chief Yard Masters/Yard Masters. Asst. Yard Masters, Shunting Masters, Pointsmen, Skid porters, Box Boys, Badge Boys etc. in yards. Running staff of General and subsidiary rule.

1.12 **System of working:**

System of working has been prescribed in the “General Rules” for ensuring safety in working for trains and vehicles / wagons. These systems ensure adequate “space interval” between trains and trains, and trains and vehicles / wagons etc. to prevent accidents such as collisions etc. Various systems of working prescribed in the General Rules are

- (i) Absolute Block System
- (ii) Automatic Block System
- (iii) Following Trains System.
- (iv) Pilot Guard System
- (v) Trains staff and Ticket System
- (vi) One Train only System.

The system mostly followed is the “Absolute Block System”, on very heavy density routes and suburban sections. Automatic Block System is generally used, other systems are followed on certain specified sections under Approved Special Instructions. “Absolute Block System” and Automatic Block System are described briefly later in this lesson.

Block Instruments.

Block stations are provided with Block Instruments which facilitate communication between adjacent Block Stations and Control on trains running.

These instruments have handles, which have normally the following three positions:

On Single	On Double Line
Line Closed	Line Closed
Train coming from	Line clear
Train Going to	Train on line

These instruments are used by the Station Masters at Block Stations to obtain "line clear" from the station in advance, advise the station in advance that the train for which "line clear" was obtained has started and entered the Block Section and to close back the Block section to normal after the trains has arrived complete at the Block station ahead. On single line sections where token working in force, a token comes out from the Block Instrument only after line clear has been obtained from the station ahead. On Double line sections and single line sections with tokenless working, it is ensured by electrical interlocking that the "Last Stop signal" can be taken "OFF" only after line clear has been obtained on the Block Instrument.

1.13 **Absolute Block System:**

Essentials of "absolute Block System" as laid down in the "General Rules" are reproduced below:

1. Where trains are worked on the Absolute Block System
 - (a) No Train shall be allowed to leave a block station unless "line clear" has been received from the Block Station in advance and
 - (b) On-double lines such line clear shall not be given unless the line is clear not only up to the first stop signal at the block station where such line clear is given but also for an adequate distance beyond it.
 - (c) On single lines such line clear shall not be given unless the line is clear of trains running in the same direction, not only up to the first stop signal as the block station at which such line clear is given, but also for an adequate distance beyond it, and is clear of trains running in the direction towards the block station to which such line clear is given
2. Unless otherwise directed by Approved Special Instructions, the adequate distance referred to above shall not be less than.
 - (a) 400 metres in case of two aspect lower quadrant signaling and
 - (b) 180 metres in case of multiple aspect signaling.

1.14 **Conditions to be satisfied for reception of a Train.**

The Station Master of a Block Station should personally ensure that the following conditions are satisfied before he authorises taking "OFF" of the reception signals for receiving a train at his station.

- (i) All the facing points concerned are correctly set and locked for the reception of the train.
- (ii) All the trailing points concerned are correctly set.
- (iii) Reception line on which it is intended to receive the train is clear up to an adequate distance beyond the starter signal (of the same direction) on the reception line, or beyond the trailing points if no Starter signal is provided.

The adequate distance referred to above should not be less than 180 metres in Two aspect Lower Quadrant signalling and 120 metres in cases of Multiple Aspect Colour Signaling. This distance is also generally known as "Signal overlap".

1.15 **Classification of Stations.**

As per General Rules, All stations are classified in two categories:

- (a) Non-Block stations: These are stopping a place which are situated between two consecutive block stations and does not form the boundary of any block section.
- (b) Block stations: At these stations the Driver must obtain an Authority to proceed under the System of working to enter the Block Section with his train.

Block Stations have been classified in three categories viz A, B and C. These areas described below in brief.

'A' class Block stations.

Such stations are provided generally on Double Line sections: Minimum equipment of fixed signals at such an station will be Warner (or distant) Home and Starter Signals in either direction. Provision of Advanced Starter Signals is optional. At such station 'Line clear' for a train cannot be granted to the

station in rear unless the line on which it is proposed to receive the train is clear up to the starter signal and all the facing points are correctly set and locked.

‘B’ class stations:

The Minimum equipment of fixed signals at such stations includes Outer and Home signals on single line sections and Outer. Home and Starter signals on Double line sections. Such a station has “Station Section” which is that portion of running lines within which shunting can be performed even after granting “Line Clear” to the station in rear(provided) the Reception signals are kept in the ON position.

At a ‘B” class station line clear can be granted for a train to approach from the station in rear even if the “station section” is not clear. Hence shunting can be carried on within the station section even after granting line clear to the station in rear.

‘C’ class Block stations.

C class stations area usually provided on double line section. The minimum equipment of signals is Warner (or Distant) and Home in either direction. No loop lines are provided and no trains are booked to stop at such stations. The purpose of such stations is to increase line capacity and to permit running of more number of trains.

1.16 Important Transportation Documents at a Block station.

Some of the important Transportation documents to be maintained at a Block station are described below:

Station Working Orders (SWOs):

This is a very important document and copies of the same must be kept in SM/ASMs office and the Block Cabins in a properly bound cover. These include a “station working order Diagram” and instructions for reception and dispatch of trains at that station as well as rules for shunting operations. A list of safety equipment to be kept at the station is also given in the SWOs. Correction Slips to the SWOs should be serially numbered and kept in the file along with SWO.

Other operating registers:

- ✓ Acknowledgement Register for SWOs (Assurance Register)
- ✓ Train register
- ✓ Caution order register
- ✓ Block Competency certificate register
- ✓ Medical register – vision test register
- ✓ Accident and unusual occurrence register
- ✓ Inspection books
- ✓ Signal and block failure register etc.

1.17 Passenger Terminal stations:

A few examples of such terminals are Mumbai CST, Mumbai Central, Churchgate, Howrah, Sealdah, Dehradun, and Kalka. In Southern Railway Chennai central station and Kanniyakumari, Mangalore central station is also the example of terminal station, few important aspects in the layouts of such stations are given below:.

(a) Reception and dispatch of trains should be easy. Adequate number of Platforms should be provided keeping in view the requirement of reception, despatch and berthing of trains. Major Stations should have route relay interlocking and all Points and Signals should be centrally operated from a Route Relay Cabin.

(b) Interlocking should permit maximum simultaneous movements both for reception and dispatch of trains as well as shunting. Diesel shunting engines should be provided as per requirements.

(c) Approach and dispersal of passengers should be easy. At suburban terminal platforms may be provided at either end of a track as has been done at Churchgate station of the Western Railway.

(d) Adequate facilities such as washing lines and sick lines should be provided for cleaning and maintenance of rakes of passenger trains.

(e) If possible, an approach road may be provided between two important platforms where passengers may get their cars, as is the case at Howrah station.

(f) The front elevation of the station may be designed beautifully.

(g) The drainage should be designed carefully so that there is not stagnation of water. Washable aprons should be provided so that cleaning of tracks is easy. Examples of two different types of layouts of terminal stations are given below (only reception lines and passenger concourse are shown).

1.18 Junction station:

A station where lines meet from more than two directions is called a junction station. A few examples are Itarsi, Moghalsarai, Lucknow, Ghaziabad, Kazipet, Muri and Bangalore. In Southern Railway, AJJ, ED, SA, TPJ etc., the following aspects may be kept in view while designing layouts of junction stations:-

- i) It should be possible to receive trains simultaneously from various directions
- ii) Adequate number of platform lines should be provided so that trains are not detained for reception at the station
- iii) In case connection is to be provided with a branch line train, an Island platform may be so designed that the passengers may transship from one train to another using the same platform.

In view of the above, an analysis has been made to review and right size the staff strength of TI/TVR section for the present system of working in TPJ Division.



CHAPTER – II**1 PRESENT SCENARIO**

TI/TVR section is one of the areas which comes under Operating Department of Tiruchchirappalli division. The Department is under the control of PCOM in Zonal level who is the Principal HOD and Sr.DOM in Divisional level and Member/Traffic at Apex level.

- 2.1 The TI/TVR section comprises of 14 stations covering a total distance of 74.87 Kms of which 8 are Block stations viz., TVR, KVL, NGT, VLNK, NCR, KIK, NNM and PEM out of which 7 “B” Class station and One Special Class station (NCR).
- 2.2 This section is a BG / Single Line Non-electrified Section of Southern Railway on “E” route towards Karaikal and “D” route towards Mayiladuthurai with Absolute Block signaling system and Multiple Aspect Colour Light signals in Standard – II (R).
- 2.3 In this section, as on date 24 Passenger Trains, 14 Weekly Express (per week) and 12 Goods Trains per day of trains are operated in this section. Around 10 shunting movements per day an average. The traffic density of TVR-NCR is 15.02, NCR-KIK is 2.98, MV-TVR is 10.34 and NGT-VLNK-0.54.
- 2.4 The percentage of utilization of line capacity in this section is TVR-NCR is 97%, NCR-KIK is 51%, MV-TVR is 62% and NGT-VLNK is 32% . There are 58 level crossings in this section of which 18 LCs are operated by Traffic department and remaining 40 are Engineering gates.
- 2.5 In this section, all Group `C` staff are working in Continuous Roster and all Group `D` staff are working in EI Roster except in TVR working in Continuous Roster even though the approved Roster is EI.
- 2.6 In the TI/TVR section, 16 SSs are working against the sanctioned strength of 18 and 33 SMs are working as against the sanctioned strength of 33. With regard to Group “D staff such as Pointsman ‘A’ & ‘B’ 38 and 54 staff are

working as against the sanctioned strength of 43 & 52 respectively. The study team has taken the sanction strength from the data furnished by DPO/TPJ and the actual from the On Roll strength of stations.

- 2.7 The Sanction, Actual, Vacancy, Excess details of staff working under TI/TVR is as under:

S. No.	Category	Sanction	Actual	Vacancy	Excess
1	SS	18	16	2	0
2	SM	33	32	1	0
3	SH.MASTER	1	3	0	2
4	POINTS MAN 'A'	46	38	8	0
5	POINTS MAN 'B'	56	54	2	0
	Total	154	143	13	2

- 2.8 The sanction, Actual, Vacancy and Excess statement is placed as **Annexure I.**

2.9 **THIRUVARUR JUNCTION:**

The station is situated at a distance of 54.06 Kms from Thanjavur Junction and adjacent block stations MV side Nannilam, NGT side Kizhvelur, TJ side Kulikarai and KKDI side Tirunellikaval. The official Code of this station is TVR. This is a `B` class Block station on TPJ-TJ-TVR-KIK section, Broad Gauge, single line non electrified Section of Southern Railway. Trains are operated in Absolute Block Signaling System provided with MACL (Multi Aspect Colour Light) signals in Standard – II Inter-locking.

There are seven running lines of around 700 mtr long each having a holding capacity of 26 coaches. Four Engineering LCs bearing Nos.30,31,37 & 35 are under the control of this station. Three Traffic LCs bearing Nos.33,36 & 34A are available.

Number of commuters at API is approximately 9,028 per day whereas the earnings per day is around Rs. 5,53,340/-. No. of wagons per day movement

is 25 and the amount of earnings Rs.30,88,940/-. Power supply is through TNEB and two generators are provided as standby arrangement. Two BPACs and two Block instruments are provided in the Panel SM room.

As per Station working rules (SWR) No.127/TVR Dt.01.08.18 the train working staff SS-1, 2 SMs at Cabin (1 for Block & 1 for Panel), 1 Sh. Master & 2 Pointsman at PF. 3 Gatekeepers one each for LCs 33,34A & LC 36 gates are manned by Traffic staff and 2 Pointsman 1 at PF and 1 at Cabin to assist PF SM & Cabin SM).

The present deployment of staff is as follows:

Sl. No	Category	San	Act	Vac	Excess
1.	SS	10	8	2	0
2.	SM	4	4	0	0
3.	SH. MASTER	0	1	0	1
4.	POINTS MAN 'A'	16	9	7	0
5.	POINTS MAN 'B'	13	15	0	2
	TOTAL	43	37	9	3

Vital Data of the Block Station tabulated as under:

I.	Name of Railway station : THIRUVARUR (TVR)	
1	In-charge SS/SM :- Contact Cell Phone No. & Rly. Phone:-	T. SIVAKUMAR 9003864938
2	Roster timings:- Shift Timings of each category of Train operating staff of Station.	PF SSs, Cabin SSs, VDU SSs :10-20,06-10, 20-24,00-06 Points Man & GK : 10-20,06-10,20-24,00-06
3	Staff strength on Roll on each grade/category-wise at the Station:-	SS-1, PF SS-2, Cabin Block SS-2, Cabin VDU SS-3, RGSM-2, LRSM-2, Sh.Mas-1, P.Man 'A'-10, P.Man 'B'-15
4	System of Train working, (Absolute/automatic) & type of Signals:-	Absolute Block System MACL Signal Interlocked
5	No. of Passengers Trains & Goods Trains running in 24hrs., in Station:-	Passenger : Daily 24; Express/Weekly:14 Goods Trains Daily 20.
6	No. of Traffic Gates:- Class of Gate, type of Gate operation, facilities and its TVUs in Stn./Trfc. Controlled Gates:-	LC Gates – 3, All 'C' class, Interlocked Light Barrier.
7	No. of Traffic Gate Keepers and their Shift timings	7 GKs. 10-20,06-10,20-24,00-06 THIRUVARUR

8	Commercial activities like; UTS & PA announcements dealt by SMs. Average No. of tickets issued/Shift & earnings:-	NO.
9	LR & RG SM from where spared for attending duty in the station (or) self-contained roster	Separate RG SM are for PF & VDU and others for Block Duty.
10	RRI Cabin if available, please mention the strength of Operating Staff with their Roster:-	EI Cabin – VDU SS-3, Cabin Block SS-3, RGSM-1, Group D Staff 3+ 1 for both the Cabin and PF.
11	No. of Shunting operations in a single day:-	Daily average – 16.
12	No. of Pts. Man at bunks in Yard and Block Proving Axle Counter put in use and functional.	Bunk – Nil. Block Proving Axle Counter is provided for TVR-KU, TVR-TNK, TVR-NNM & TVR-KVL Block sections.
13	Call boy posts available & Operating Staff Look after retiring Rooms	--
14	No. of Points and Crossings, Station equipments, facilities like sand hump, isolation etc.	Enclosed
15	Siding details No. of Trains dealt with siding in a shift per day.	NIL
16	Station Cleaning Contracts for Station premises.	Cleaning Contract prevails for station cleaning.
17	TI section jurisdiction:- TI's staff strength each category-wise. Roster and duties.	TVR, KVL, NGT, NCR, KIK, VLNK, PEM & NNM
18	Clear standing Length of each Road of the Railway Station:-	Road 1-686, Rd 2-710, Rd 3-720, Rd 4-705, Rd 5-705, Rd 6-715 and Rd 7 – 715 Mts.
19	Details of FOIS, COIS are operated at this Station by operating Staff	No
20	Any work of Train operation need not be carried out due to improvements in Train operation handling provided.	--
21	No. of Engine changes necessary in a Day.	--
22	Regular Marshalling of Train is done	For Passenger Trains RC marshalling of SLR sometimes. For Goods Trains RC marshalling of BV
23	No. of Shunting for Pit-line/Sick line Maintenance in a Day:-	--
24	Operating Staff (avg.) movement to other stations in month and TA Claims/Month	--
25	No. of Motor operated Points and No. of Manual Points of a Railway Station	No of Motor operated points :25 & Manual Points – NIL.
26	Whether Simultaneous (reception & dispatch) Movement of Trains	Yes.

	feasibility	
27	Any Diamond Xing, VIP siding details	Not available
28	The Time of First Train running in a Day in this Station.	01 - 02 hrs.
29	The Time of Last Train running in a Day in this Station.	23.20 hrs.
30	Specify the free hours in a Railway Station without any train running movement? If it exists in No. of spells also please specify.	--
31	Distribution of Staff:-	Each Shift 1 PF SM, 1 Cabin SM, 1 Cabin SM(VDU), 1 SHM, 2 PF PM, 1 Cabin PM, 1 PF PM, 3 GKs.

2.10 **KIZHVELUR:**

The station is located at a distance of 66.185 Kms from TJ on TJ-NGT-KIK and in between two block stations of Thiruvarur and Nagapattinam. The official code of the station is KVL. Continuous track circuits are provided between UP & DN Home signals and for a distance of 3 rail lengths in the rear of the both Home signals. KVL is a 'B' class Block station, broad gauge, Single line non-electrified station. NGT and TVR are the two adjacent block stations at a distance of 11.35 Kms on East and 11.71 Kms on West respectively. No class 'D' stations on either side.

Three running lines having a length of 732,701 & 759 mts. each with holding capacity of 18 coaches is provided at this station. The steepest gradient on NGT side is 1 in 2000 falling towards the station and TVR side is 1 in 2000 falling away from the station. The power supply is from both sources, one through TNEB and another through two generators provided for the purpose.

Average number of passengers per day is approximately 143 and earnings is Rs. 2,760/- on an average. Shunting operations in the face of approaching trains strictly prohibited.

Number of LCs controlled by this station is 8, out of which 2 pertains to Traffic i.e., Special class LC No. 40 at Km 66/000-100 and 'C' class LC No. 41 at Km 67/200-300.

The system of signaling is Absolute Block system with MACLS standard IIR interlocking. Regarding number of BPACs it is two and same number of Block instruments is available.

As per SWR No.T.187/KVL, Each shift 1 SM, 1 P. Man at PF, 2 GK/P. Man at LC No. 40 & 41 Class Special and 'C' respectively is provided.

The present deployment of staff is as follows:

Sl. No	Category	San	Act	Vac	Excess
1.	SS	1	1	0	0
2.	SM	3	3	0	0
3.	POINTS MAN 'A'	3	3	0	0
4.	POINTS MAN 'B'	4	4	0	0
TOTAL		11	11	0	0

Vital Data of the Block Station tabulated as under:

I.	Name of Railway station : KIZHVELUR (KVL)	
1	In-charge SS/SM :- Contact Cell Phone No. & Rly. Phone:-	RAM CHARAN MEENA 9894861935/79815
2	Roster timings:- Shift Timings of each category of Train operating staff of Station.	SSs,SMs, RGSM (Continuous):10-20,06-10, 20-24,00-06 Points Man (EI) : 08-20, 20-24, 00-08
3	Staff strength on Roll on each grade/category-wise at the Station:-	SS-1, SM-2, RGSM-1, P.Man 'A'-3, P.Man 'B'-4
4	System of Train working, (Absolute/automatic) & type of Signals:-	Absolute Block System MACL Signal Interlocked
5	No. of Passengers Trains & Goods Trains running in 24hrs., in Station:-	Passenger : Daily 10; Express/Weekly:4 Goods Trains Daily 12.
6	No. of Traffic Gates:- Class of Gate, type of Gate operation, facilities and its TVUs in Stn./Trfc. Controlled Gates:-	LC Gates – 2, Special and 'C' class each - Interlocked Light Barrier.
7	No. of Traffic Gate Keepers and their Shift timings	1 GKs. Each for each shift. 08-20, 20-24, 00-08
8	Commercial activities like; UTS & PA announcements dealt by SMs. Average No. of tickets issued/Shift & earnings:-	Duty SM issues UTS tickets during day shift. No train in night for UTS ticket.
9	LR & RG SM from where spared for attending duty in the station (or) self-contained roster	LR-SM for KVL – NIL; RG SM -1, Spare day duty pick up KIK, NCR, NGT, VLNK, TVR, NNM, PEM, NMJ & MQ.

10	RRI Cabin if available, please mention the strength of Operating Staff with their Roster:-	--
11	No. of Shunting operations in a single day:-	--
12	No. of Pts. Man at bunks in Yard and Block Proving Axle Counter put in use and functional.	--
13	Call boy posts available & Operating Staff Look after retiring Rooms	--
14	No. of Points and Crossings, Station equipments, facilities like sand hump, isolation etc.	--
15	Siding details No. of Trains dealt with siding in a shift per day.	--
16	Station Cleaning Contracts for Station premises.	No Cleaning Contract. Imprest cash is utilizing for station cleaning.
17	TI section jurisdiction:- TI's staff strength each category-wise. Roster and duties.	TVR, KVL, NGT, NCR, KIK, VLNK, PEM & NNM
18	Clear standing Length of each Road of the Railway Station:-	Road 1-732, Rd 2-701 & Rd 3-759 Mts.
19	Details of FOIS, COIS are operated at this Station by operating Staff	--
20	Any work of Train operation need not be carried out due to improvements in Train operation handling provided.	--
21	No. of Engine changes necessary in a Day.	--
22	Regular Marshalling of Train is done	--
23	No. of Shunting for Pit-line/Sick line Maintenance in a Day:-	--
24	Operating Staff (avg.) movement to other stations in month and TA Claims/Month	--
25	No. of Motor operated Points and No. of Manual Points of a Railway Station	No of Motor operated points : 4 & Manual Points – NIL.
26	Whether Simultaneous (reception & dispatch) Movement of Trains feasibility	An up train on Road 1 and Down train on Road 3 or vice versa possible at this station.
27	Any Diamond Xing, VIP siding details	Not available
28	The Time of First Train running in a Day in this Station.	04.30 hrs.
29	The Time of Last Train running in a Day in this Station.	22.00 hrs.

30	Specify the free hours in a Railway Station without any train running movement? If it exists in No. of spells also please specify.	--
31	Distribution of Staff:-	Each Shift 1 SM, 1 PF PM, 1 PM each at LCs.

2.11 **NAGAPATTINAM JUNCTION :**

The station is located at a distance of **23** Km from TVR on TVR-NGT-KIK section in between Andanappettai (3 Kms) and Vellipalayam (2 Kms.). The official code of the station is NGT. Continuous track circuits are provided between UP & DN Home signals and for a distance of 4 rail lengths in the rear of the both Home signals. NGT is a `B` class Block station, broad gauge, Single line non-electrified station. NCR, KVL & VLNK are the adjacent block stations at a distance of 7.00 Kms., 11 Kms. & 10 Kms respectively.

4 running lines to hold 24 coaches of 677, 691, 668 & 725 mts each is provided at this station. The steepest gradient on NCR side is 1 in 400 falling towards NCR side, KVL side 1 in 200 falling towards KVL side and VLNK side 1 in 200 falling towards NGT side. With regard to BPACs and Block instruments it is three in number. The system of signaling is Absolute Block system with MACLS in Standard II R.

Average number of passengers per day is approximately 2435 and earnings is Rs.1,53,745/- on an average and No. of wagons is 4 per day with the earnings of Rs.1,09,735/-.

Number of LCs controlled by this station is 9, out of which 2 pertains to Traffic i.e., Special Class LC No.48 at Km 77/700-800 and `C` class LC No.47 at Km 76/900-000 and the rest are engineering gates.

As per SWR No.T.189/NGT, 1 SS, 1 SM on Duty at PF, 1 SM at Cabin, 2 Pointsman at PF duty, 1 Pointsman at Cabin and 2 GKs one each for LCs 47 & 48 are provided in each shift.

The present deployment of staff is as follows:

SI. No	Category	San	Act	Vac	Excess
1.	SS	1	2	0	1
2.	SM	8	7	1	0
3.	POINTS MAN 'A'	11	5	6	0
4.	POINTS MAN 'B'	5	8	0	3
	TOTAL	25	22	7	4

Vital Data of the Block Station tabulated as under:

I.	Name of Railway station : NAGAPATTINAM (NGT)	
1	In-charge SS/SM :- Contact Cell Phone No. & Rly. Phone:-	N. PRABAKAR 805606406/79824
2	Roster timings:- Shift Timings of each category of Train operating staff of Station.	SSs, SMs, RGSM (Continuous):10-20,06-10, 20-24,00-06 Points Man (EI) : 08-20, 20-24, 00-08
3	Staff strength on Roll on each grade/category-wise at the Station:-	SS-1, SM-7, P.Man 'A'-5, P.Man 'B'-8
4	System of Train working, (Absolute/automatic) & type of Signals:-	Absolute Block System MACL Signal Interlocked
5	No. of Passengers Trains & Goods Trains running in 24hrs., in Station:-	Passenger : Daily 20; Express/Weekly:4 Goods Trains Daily 14.
6	No. of Traffic Gates:- Class of Gate, type of Gate operation, facilities and its TVUs in Stn./Trfc. Controlled Gates:-	LC Gates – 2, Special and 'C' class each - Interlocked Light Barrier.
7	No. of Traffic Gate Keepers and their Shift timings	6 GKs. 08-20, 20-24,00-08
8	Commercial activities like; UTS & PA announcements dealt by SMs. Average No. of tickets issued/Shift & earnings:-	NO
9	LR & RG SM from where spared for attending duty in the station (or) self-contained roster	Self contained RG and No LR.
10	RRI Cabin if available, please mention the strength of Operating Staff with their Roster:-	SM-3, 10-20, 06-10, 20-24/00-06 PM 'B' – 3, 08-2-, 20-24/00-08.
11	No. of Shunting operations in a single day:-	12
12	No. of Pts. Man at bunks in Yard and Block Proving Axle Counter put in use and functional.	BUNK – NIL; BPAC Provided
13	Call boy posts available & Operating Staff Look after retiring Rooms	--
14	No. of Points and Crossings, Station equipments, facilities like sand hump, isolation etc.	No. of points -7, Clamps, Skid, Safety Chain, Detonators and Sand hump.
15	Siding details No. of Trains dealt with siding in a shift per day.	--
16	Station Cleaning Contracts for Station premises.	Contract under CMS control.
17	TI section jurisdiction:- TI's staff strength each category-wise. Roster and duties.	TVR, KVL, NGT, NCR, KIK, VLNK, PEM & NNM

18	Clear standing Length of each Road of the Railway Station:-	Road 1-677, Rd 2-691 & Rd 3-668 and Rd 4-725Mts.
19	Details of FOIS, COIS are operated at this Station by operating Staff	--
20	Any work of Train operation need not be carried out due to improvements in Train operation handling provided.	--
21	No. of Engine changes necessary in a Day.	--
22	Regular Marshalling of Train is done	--
23	No. of Shunting for Pit-line/Sick line Maintenance in a Day:-	--
24	Operating Staff (avg.)movement to other stations in month and TA Claims/Month	5 days.
25	No. of Motor operated Points and No. of Manual Points of a Railway Station	No of Motor operated points : 13 & Manual Points – NIL.
26	Whether Simultaneous (reception & dispatch) Movement of Trains feasibility	Yes. Available.
27	Any Diamond Xing, VIP siding details	VIP Siding only available
28	The Time of First Train running in a Day in this Station.	04.10 hrs.
29	The Time of Last Train running in a Day in this Station.	22.00 hrs.
30	Specify the free hours in a Railway Station without any train running movement? If it exists in No. of spells also please specify.	No free hours due to goods train movement.
31	Distribution of Staff:-	Each Shift 1 SS, 1 PF SM, 1 SM AT Cabin, 2 PM and PF 1 PM at Cabin and 2 GKs each for LCs 47 & 48.

2.12 **VELANKANNI:**

Velankanni a `B` class station, having its official code as VLNK is situated at a distance of 33 Kms from TVR on TVR-NGT-VLNK section lies after Nagappattinam Junction and it is a terminal station. Average number of passengers per day is 50 and whereas earnings is around Rs.2,51,560 on an average.

Adjacent block station is NGT at a distance of 10 kms. There are three running lines and one VIP siding at this station. BPAC is provided at this station with Block instrument.

The gradient is NGT side 1 in 3920 falling away from station. The normal source of power supply for the signaling installation is from the TNEB and alternate source is two generators provided for the purpose. The system of working is Absolute Block system with MACLS in standard II - R interlocking.

Number of LC gates controlled by this station is 6, out of which 1 LC is pertains to Traffic department i.e., LC 7 at Km 9/400-300 which is 'C' class.

As per SWR No.T.188/VLNK, 1 SM, 1 PM at PF, 1 GK/P. Man at LC 7 is allotted to this station for each shift.

The present deployment of staff is as follows:

Sl. No	Category	San	Act	Vac	Excess
1.	SS	1	0	1	0
2.	SM	3	4	0	1
3.	POINTS MAN 'A'	2	2	0	0
4.	POINTS MAN 'B'	7	3	4	0
	TOTAL	13	9	5	1

Vital Data of the Block Station tabulated as under:

I.	Name of Railway station : VELANKANNI(VLNK)	
1	In-charge SS/SM :- Contact Cell Phone No. & Rly. Phone:-	GANGA RAM MEENA 8248339235
2	Roster timings:- Shift Timings of each category of Train operating staff of Station.	SMs (Continuous):10-20,06-10, 20-24,00-06 Points Man (EI) : 08-20, 20-24, 00-08
3	Staff strength on Roll on each grade/category-wise at the Station:-	SS-1, SM-4, RGSM-1, P.Man – 5.
4	System of Train working, (Absolute/automatic) & type of Signals:-	Absolute Block System MACL Signal Interlocked
5	No. of Passengers Trains & Goods Trains running in 24hrs., in Station:-	Passenger/Express - Daily/Weekly: 6
6	No. of Traffic Gates:- Class of Gate, type of Gate operation, facilities and its TVUs in Stn./Trfc. Controlled Gates:-	LC Gate – 1 'C' class - Interlocked Light Barrier.
7	No. of Traffic Gate Keepers and their Shift timings	2 GKs. EI (4/14 & 14/24); Velankanni.
8	If any, Commercial activities like; UTS & PA announcements dealt by SMs.	--

	Average No. of tickets issued/Shift & earnings:-	
9	LR & RG SM from where spared for attending duty in the station (or) self-contained roster	Self contained roster.
10	RRI Cabin if available, please mention the strength of Operating Staff with their Roster:-	--
11	No. of Shunting operations in a single day:-	1.
12	No. of Pts. Man at bunks in Yard and Block Proving Axle Counter put in use and functional.	Nil. BPAC at NGT side.
13	Call boy posts available & Operating Staff Look after retiring Rooms	--
14	Copy of yard diagram/sketch (enclose copy) No. of Points and Crossings, Station equipments, facilities like sand hump, isolation etc.	--
15	Siding details No. of Trains dealt with siding in a shift per day.	--
16	Station Cleaning Contracts for Station premises.	No Cleaning Contract.
17	TI section jurisdiction:- TI's staff strength each category-wise. Roster and duties.	TVR, KVL, NGT, NCR, KIK, VLNK, PEM & NNM
18	Clear standing Length of each Road of the Railway Station:-	Road 1-754, Rd 2-699 & Rd 3-734 Mts.
19	Details of FOIS, COIS are operated at this Station by operating Staff	--
20	Any work of Train operation need not be carried out due to improvements in Train operation handling provided.	--
21	No. of Engine changes necessary in a Day.	1.
22	Regular Marshalling of Train is done	--
23	No. of Shunting for Pit-line/Sick line Maintenance in a Day:-	--
24	Operating Staff (avg.) movement to other stations in month and TA Claims/Month	1 for entire month.
25	No. of Motor operated Points and No. of Manual Points of a Railway Station	No of Motor operated points : 5 & Manual Points – NIL.
26	Whether Simultaneous (reception & dispatch) Movement of Trains feasibility	Not applicable.

27	Any Diamond Xing, VIP siding details	VIP siding available
28	The Time of First Train running in a Day in this Station.	06.30 hrs.
29	The Time of Last Train running in a Day in this Station.	20.45 hrs.
30	Specify the free hours in a Railway Station without any train running movement? If it exists in No. of spells also please specify.	--
31	Distribution of Staff:-	Each Shift 1 SM, 1 PF PM, 1 PM at LC 7.

2.13 **NAGORE:**

Nagore with official code as NCR is located in between Vellipalayam and Thirumalairayanpattinam at a distance of 30 Kms from TVR. Number of passengers per day on an average is 1,020 whereas the average earnings is Rs.70,608/- and No. of wagons per day 279 with the earnings of Rs.1,20,91,007/-.

Nagapattinam and Karaikal are the two adjacent block stations at 7.00 and 18 Kms respectively on either side. Running lines are four capacity is available at this station. Two BPACs is provided at this station to check the axle counters of the trains entering the station. The normal source of power supply for the signaling installation is from the TNEB and alternate source is two generators provided for the purpose.

Totally 8 LCs are controlled by this station out of which 3 LC's are manned by Traffic having two are 'C' class LC No. 62 & 63 at Km 83/900-84/000 & 85/000-100 and 1 Special Class LC No.64 at Km 85/800-900. As per SWR No.T.192/NCR, 2 SSs (1 at NCR & 1 at KIKP siding), 1 SM, 2 PM at PF duty, 3 GKs one each for LCs.62,63 & 64 for each shift is allotted to this station.

The present deployment of staff is as follows:

Sl. No	Category	San	Act	Vac	Excess
1.	SS	2	2	0	0
2.	SM	5	5	0	0
3.	POINTS MAN 'A'	5	3	2	0
4.	POINTS MAN 'B'	8	10	0	2
	TOTAL	20	20	2	2

Vital Data of the Block Station tabulated as under:

I.	Name of Railway station : NAGORE (NCR)	
1	In-charge SS/SM :- Contact Cell Phone No. & Rly. Phone:-	SANTHOSH KUMAR PANDEY/7845326649 (NCR) R. SURESH/ 9486407291, 79818 (KIKP)
2	Roster timings:- Shift Timings of each category of Train operating staff of Station.	SSs,SMs :10-20, 06-10, 20-24, 00-06 Points Man (EI) : 08-20, 20-24, 00-08 TNC – 6-14, 14-22
3	Staff strength on Roll on each grade/category-wise at the Station:-	SS-2, SM-5, SH.M-2, P.Man 'A'-3, P.Man 'B'-10 CBSR-1, CCC-1, SRCC-2, CBC-1, CSR-1, TAC-2
4	System of Train working, (Absolute/automatic) & type of Signals:-	Absolute Block System MACL Signal Interlocked
5	No. of Passengers Trains & Goods Trains running in 24hrs., in Station:-	Passenger/Express/Daily/Weekly: 17 Goods Trains Daily 10.
6	No. of Traffic Gates:- Class of Gate, type of Gate operation, facilities and its TVUs in Stn./Trfc. Controlled Gates:-	LC Gates – 3, all are 'C' class each.
7	No. of Traffic Gate Keepers and their Shift timings	9 GKs. Each for each shift. 08-20, 20-24, 00-08 self contained.
8	Commercial activities like; UTS & PA announcements dealt by SMs. Average No. of tickets issued/Shift & earnings:-	PA system dealt by SMs.
9	LR & RG SM from where spared for attending duty in the station (or) self-contained roster	Self contained. 10-20, 6-10, 20-24, 0-6.
10	RRI Cabin if available, please mention the strength of Operating Staff with their Roster:-	--
11	No. of Shunting operations in a single day:-	10
12	No. of Pts. Man at bunks in Yard and Block Proving Axle Counter put in use and functional.	BPAC – 2
13	Call boy posts available & Operating Staff Look after retiring Rooms	--
14	No. of Points and Crossings, Station equipments, facilities like sand hump, isolation etc.	--
15	Siding details No. of Trains dealt with siding in a shift per day.	KARAIKAL PORT SIDING (KIKP) – 10.
16	Station Cleaning Contracts for Station premises.	--
17	TI section jurisdiction:- TI's staff strength each category-wise. Roster and duties.	TVR, KVL, NGT, NCR, KIK, VLNK, PEM & NNM

18	Clear standing Length of each Road of the Railway Station:-	Road 1-700, Rd 2-700, Rd 3-763, Rd-763 Mts.
19	Details of FOIS, COIS are operated at this Station by operating Staff	--
20	Any work of Train operation need not be carried out due to improvements in Train operation handling provided.	--
21	No. of Engine changes necessary in a Day.	--
22	Regular Marshalling of Train is done	--
23	No. of Shunting for Pit-line/Sick line Maintenance in a Day:-	--
24	Operating Staff (avg.)movement to other stations in month and TA Claims/Month	3
25	No. of Motor operated Points and No. of Manual Points of a Railway Station	No of Motor operated points : 7 & Manual Points – NIL.
26	Whether Simultaneous (reception & dispatch) Movement of Trains feasibility	UP and DOWN in Road 1,3 & 4 available.
27	Any Diamond Xing, VIP siding details	Not available
28	The Time of First Train running in a Day in this Station.	03.55 hrs.
29	The Time of Last Train running in a Day in this Station.	21.45 hrs.
30	Specify the free hours in a Railway Station without any train running movement? If it exists in No. of spells also please specify.	No free hours.
31	Distribution of Staff:-	2 SS, 5 SM, 2 SH.MAN, 3 PM 'A' and 10 PM 'B', TNC – 3 & COMML.9

2.14 **KARAIKAL:**

Karaikal is a `B` class Block station located after Tirumalairayanpattinam station and it is terminal station at a distance of 41 Km from TVR. The official code of this station is KIK. Nagore is a adjacent block station at a distant of 11.00 Kms. Three running lines are available at this station. BPACs are provided at this station to check the axle counters of the trains entering the station. The section is Single line Broad gauge and non-electrified section. The power supply is through AT as well as KSEB. The gradient is available in

NCR side. Number of passengers per day on an average is 1,556 whereas the average earnings is Rs.1,44,028/-. Out of 5 LCs three LCs No.69, 70 & 71 are manned by Traffic staff and the rest of 2 are Engineering gates.

As per SWR No.T.189/KIK, 1 SM, 2 PMAN at PF duty and 3 GKs one each for LCs 69, 70 & 71.

The present deployment of staff is as follows:

Sl. No	Category	San	Act	Vac	Excess
1.	SS	1	1	0	0
2.	SM	4	4	0	0
3.	POINTS MAN 'A'	0	6	0	6
4.	POINTS MAN 'B'	8	9	0	1
	TOTAL	13	20	0	7

Vital Data of the Block Station tabulated as under:

I.	Name of Railway station : KARAIKAL (KIK)	
1	In-charge SS/SM :- Contact Cell Phone No. & Rly. Phone:-	G. MUTHUKUMAR 9843600190
2	Roster timings:- Shift Timings of each category of Train operating staff of Station.	SSs,SMs :10-20, 06-10, 20-24, 00-06 Points Man (EI) : 08-20, 20-24, 00-08
3	Staff strength on Roll on each grade/category-wise at the Station:-	SS-1, SMS-3
4	System of Train working, (Absolute/automatic) & type of Signals:-	Absolute Block System MACL Signal Interlocked
5	No. of Passengers Trains & Goods Trains running in 24hrs., in Station:-	Passenger/Express/Daily/Weekly: 17
6	No. of Traffic Gates:- Class of Gate, type of Gate operation, facilities and its TVUs in Stn./Trfc. Controlled Gates:-	LC Gates – 1 Special and 2 'C' class gates. LC 69 1,806, LC 70-1,05,408 & LC 71 – 1,13,856.
7	No. of Traffic Gate Keepers and their Shift timings	3 GKs. Per Gate Round the Clock duty - 08-20, 20-24, 00-08. LR & RG from KIK.
8	Commercial activities like; UTS & PA announcements dealt by SMs. Average No. of tickets issued/Shift & earnings:-	No Commercial activities by SMs. PA system dealt by SMs.
9	LR & RG SM from where spared for attending duty in the station (or) self-contained roster	Self contained RG & LR. 10-20, 6-10, 20-24
10	RRI Cabin if available, please mention the strength of Operating Staff with their Roster:-	--
11	No. of Shunting operations in a single day:-	4 trains ETR is being done in 24 Hrs.

12	No. of Pts. Man at bunks in Yard and Block Proving Axle Counter put in use and functional.	Two PM in yard is deployed. BPAC provided.
13	Call boy posts available & Operating Staff Look after retiring Rooms	--
14	No. of Points and Crossings, Station equipments, facilities like sand hump, isolation etc.	--
15	Siding details No. of Trains dealt with siding in a shift per day.	--
16	Station Cleaning Contracts for Station premises.	--
17	TI section jurisdiction:- TI's staff strength each category-wise. Roster and duties.	TVR, KVL, NGT, NCR, KIK, VLNK, PEM & NNM
18	Clear standing Length of each Road of the Railway Station:-	Road 1-803, Rd 2-733, Rd 3-777 Mts.
19	Details of FOIS, COIS are operated at this Station by operating Staff	--
20	Any work of Train operation need not be carried out due to improvements in Train operation handling provided.	--
21	No. of Engine changes necessary in a Day.	4
22	Regular Marshalling of Train is done	--
23	No. of Shunting for Pit-line/Sick line Maintenance in a Day:-	--
24	Operating Staff (avg.) movement to other stations in month and TA Claims/Month	3 staff normally 3 to 5 days per month.
25	No. of Motor operated Points and No. of Manual Points of a Railway Station	No of Motor operated points : 5 & Manual Points – NIL.
26	Whether Simultaneous (reception & dispatch) Movement of Trains feasibility	Being terminal station, no simultaneous reception.
27	Any Diamond Xing, VIP siding details	Not available
28	The Time of First Train running in a Day in this Station.	06.10 hrs.
29	The Time of Last Train running in a Day in this Station.	17.50 hrs.
30	Specify the free hours in a Railway Station without any train running movement? If it exists in No. of spells also please specify.	No free hours.
31	Distribution of Staff:-	

2.15 **NANNILAM:**

The station is a class 'B' station located at a distance of 14 from TVR on the TVR-MV section which is interlocked to standard II R. The station is provided with MACLS. Two adjacent block stations are Peralam at a distance of 9 Kms and Thiruvavur at a distance of 14 Kms. Two sources of power is available, one from State Electricity Board and other from OHE through AT and alternate source is two generators provided for the purpose.

Out of 5 LCs, LC No.22 at Km 24/300-400 is under the control of NNM, which is manned by Traffic staff and rest of the 4 LCs are Engineering gates. Number of passengers per day on an average is 61 whereas the average earnings is Rs.1,319/-. The station cleanliness is through Imprest, and no Railway staff is employed for this purpose.

As per SWR No.T.117/NNM, One SM, One PM at PF and 1 PM for LC22 for each shift.

The present deployment of staff is as follows:

Sl. No	Category	San	Act	Vac	Excess
1.	SS	1	1	0	0
2.	SM	3	3	0	0
3.	POINTS MAN 'A'	4	5	0	1
4.	POINTS MAN 'B'	3	2	1	0
	TOTAL	11	11	1	1

Vital Data of the Block Station tabulated as under:

I.	Name of Railway station : NANNILAM (NNM)	
1	In-charge SS/SM :- Contact Cell Phone No. & Rly. Phone:-	V. RAVI 9443587332
2	Roster timings:- Shift Timings of each category of Train operating staff of Station.	SSs,SMs :10-20, 06-10, 20-24, 00-06 Points Man (EI) : 08-20, 20-24, 00-08
3	Staff strength on Roll on each grade/category-wise at the Station:-	SS-1, SMS-2, 1 RGSM. PM 'A'-5, PM 'B'-2.
4	System of Train working, (Absolute/automatic) & type of Signals:-	Absolute Block System MACL Signal Interlocked
5	No. of Passengers Trains & Goods Trains running in 24hrs., in Station:-	Passenger/Express/Daily/Weekly: 14 Good Train – 8.

6	No. of Traffic Gates:- Class of Gate, type of Gate operation, facilities and its TVUs in Stn./Trfc. Controlled Gates:-	LC No.22 which is Special class. Interlocked. Lifting Barrier – TVU 56,574.
7	No. of Traffic Gate Keepers and their Shift timings	2 GKs. 08-20, 20-24, 00-08.
8	Commercial activities like; UTS & PA announcements dealt by SMs. Average No. of tickets issued/Shift & earnings:-	UTS & PA system available. Average No. of tickets per shift 20x3 =60. Average earnings per shift 500 x 3 = Rs.1500/-
9	LR & RG SM from where spared for attending duty in the station (or) self-contained roster	Self contained RG & LRs. 10-20, 6-10, 20-24
10	RRI Cabin if available, please mention the strength of Operating Staff with their Roster:-	--
11	No. of Shunting operations in a single day:-	Occasionally 4 moves per month.
12	No. of Pts. Man at bunks in Yard and Block Proving Axle Counter put in use and functional.	SSDAC (HA)
13	Call boy posts available & Operating Staff Look after retiring Rooms	--
14	No. of Points and Crossings, Station equipments, facilities like sand hump, isolation etc.	Overrun lines provided for 1 & 3.
15	Siding details No. of Trains dealt with siding in a shift per day.	--
16	Station Cleaning Contracts for Station premises.	--
17	TI section jurisdiction:- TI's staff strength each category-wise. Roster and duties.	TVR, KVL, NGT, NCR, KIK, VLNK, PEM & NNM
18	Clear standing Length of each Road of the Railway Station:-	Road 1-715, Rd 2-715, Rd 3-715 Mts.
19	Details of FOIS, COIS are operated at this Station by operating Staff	--
20	Any work of Train operation need not be carried out due to improvements in Train operation handling provided.	--
21	No. of Engine changes necessary in a Day.	--
22	Regular Marshalling of Train is done	--
23	No. of Shunting for Pit-line/Sick line Maintenance in a Day:-	--
24	Operating Staff (avg.) movement to other stations in month and TA Claims/Month	3 staff.

25	No. of Motor operated Points and No. of Manual Points of a Railway Station	No of Motor operated points : 4 & Manual Points – NIL.
26	Whether Simultaneous (reception & dispatch) Movement of Trains feasibility	Yes.
27	Any Diamond Xing, VIP siding details	Not available
28	The Time of First Train running in a Day in this Station.	03.29 hrs.
29	The Time of Last Train running in a Day in this Station.	23.40 hrs.
30	Specify the free hours in a Railway Station without any train running movement? If it exists in No. of spells also please specify.	10.00 to 12 Hrs. 16.00 to 16.30 Hrs.
31	Distribution of Staff:-	Each shift 1 SM, 1 PF PM & 1 GK at LC22.

2.16 **PERALAM:**

Peralam is a class `B` station with single line non-electrified section and interlocked to standard II R situated at a distance of Km 23 from TVR on the TVR-MV section. The station is equipped with MACLS, Points and signals are operated from a control panel provided in the office of the SM on duty.

The station is located between Mayiladuthurai at a distance of 15 Kms and Punthottam at a distance of 3 Km. The ruling gradient in MV side raising gradient of 1 in 250 beyond DN home and NNM side raising gradient of 1 in 250 for a distance of 200 mts. Beyond Shunt Disc 17. Out of 10 LC gates 2 LCs No.15 & 16 and remaining 8 LCs are Engineering gates. Power supply is by way of two sources one from State Electricity Board and other from AT. No Level crossing is controlled by this station.

Average number of commuters per day is around 191 and earnings is approximately Rs. 9,196/- and No. of wagons is 8 with the earnings of Rs.1,98,684/-.

As per SWR No.T.110/ PEM allotment for Train working staff is one SM, one PM at PF & 2 GKs one each for LC 15 & 16 for each shift.

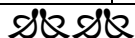
The present deployment of staff is as follows:

Sl. No	Category	San	Act	Vac	Excess
1.	SS	1	1	0	0
2.	SM	3	3	0	0
3.	POINTS MAN 'A'	5	5	0	0
4.	POINTS MAN 'B'	8	3	5	0
	TOTAL	17	12	5	0

Vital Data of the Block Station tabulated as under:

I.	Name of Railway station : PERALAM (PEM)	
1	In-charge SS/SM :- Contact Cell Phone No. & Rly. Phone:-	M. JEYARAMAN 9994510716
2	Roster timings:- Shift Timings of each category of Train operating staff of Station.	SSs,SMs :10-20, 06-10, 20-24, 00-06 Points Man (EI) : 08-20, 20-24, 00-08
3	Staff strength on Roll on each grade/category-wise at the Station:-	SS/SMS-3, 1 RGSM. PM 'A' & 'B' -3, RG-1 per shift.
4	System of Train working, (Absolute/automatic) & type of Signals:-	Absolute Block System MACL Signal Interlocked
5	No. of Passengers Trains & Goods Trains running in 24hrs., in Station:-	Passenger/Express/Daily/Weekly: 14 Good Train – 5.
6	No. of Traffic Gates:- Class of Gate, type of Gate operation, facilities and its TVUs in Stn./Trfc. Controlled Gates:-	LC No.15 & 16 'C' and Special 'A'.
7	No. of Traffic Gate Keepers and their Shift timings	2 Traffic LC gates 60 Hrs. in a week.
8	Commercial activities like; UTS & PA announcements dealt by SMs. Average No. of tickets issued/Shift & earnings:-	UTS & PA system available.
9	LR & RG SM from where spared for attending duty in the station (or) self-contained roster	Self contained RG & LRs. 3 days duty and 3 days S pass in a week.
10	RRI Cabin if available, please mention the strength of Operating Staff with their Roster:-	--
11	No. of Shunting operations in a single day:-	6 Shunts, single entry for MV. Goods loading station – Goods placement 3 and reload 3 shunts.
12	No. of Pts. Man at bunks in Yard and Block Proving Axle Counter put in use and functional.	No additional PM or commercial staff. BPAC in use and functional.
13	Call boy posts available & Operating Staff Look after retiring Rooms	--
14	No. of Points and Crossings, Station equipments, facilities like sand hump,	Four points via 50,52,54 & 61 equipments available no shortfall. Road 1 provided

	isolation etc.	with Sand hump.
15	Siding details No. of Trains dealt with siding in a shift per day.	Goods line (Non running). 21 + 13 dealt for Loading and Unloading.
16	Station Cleaning Contracts for Station premises.	--
17	TI section jurisdiction:- TI's staff strength each category-wise. Roster and duties.	TVR, KVL, NGT, NCR, KIK, VLNK, PEM & NNM
18	Clear standing Length of each Road of the Railway Station:-	Road 1-739, Rd 2-739, Rd 3-414 & Rd 4-444 Mts.
19	Details of FOIS, COIS are operated at this Station by operating Staff	FOIS operated from MV.
20	Any work of Train operation need not be carried out due to improvements in Train operation handling provided.	Punctuality improvement need more no. of staff to ensure safety.
21	No. of Engine changes necessary in a Day.	--
22	Regular Marshalling of Train is done	--
23	No. of Shunting for Pit-line/Sick line Maintenance in a Day:-	--
24	Operating Staff (avg.)movement to other stations in month and TA Claims/Month	LRSM 3 days in a month with T.A. SS/PEM 2.8 days cash bag handing over to CBSR/MV.
25	No. of Motor operated Points and No. of Manual Points of a Railway Station	All points are Motor operated points. Manual Points – NIL.
26	Whether Simultaneous (reception & dispatch) Movement of Trains feasibility	One up and reception simultaneously.
27	Any Diamond Xing, VIP siding details	Not available
28	The Time of First Train running in a Day in this Station.	02.35 hrs.
29	The Time of Last Train running in a Day in this Station.	23.30 hrs.
30	Specify the free hours in a Railway Station without any train running movement? If it exists in No. of spells also please specify.	No free hours.
31	Distribution of Staff:-	1 SS/SM, 3 PM & 1 SS/SM. 3 PM. PF LC15 & 16.



3.0 CRITICAL ANALYSIS

The operating department is the backbone of train operations. In fact, all other departments like Mechanical, Engineering, Electrical, S&T etc works in co-ordination with operating department in achieving the goal. Now-a-days, the quantum of workload of operating department at stations has been changed to a great extent following the introduction of modern equipments like RRI, MACLS, Electrically operated point motors, Automatic signaling, thereby hard manual operation of points and signals through levers are avoided and Wireless communication between Station masters and Loco pilots/Guards easing the stationmaster to exchange the messages over wireless rather by his personal approach.

- 3.1 In order to maintain the financial viability of the Railway Organization, it is to be ensured that its existing resources especially its manpower is to be utilized at optimum level. Since the manpower is the biggest and the most important component of the expenditure of Indian Railways, the right sizing of man power is the best way to reduce unit cost which is an effective way to increase efficiency as well as the economy of Indian Railways. But along with right sizing and restriction of intake it will be necessary and very much essential to utilize the existing man power to the optimum level. Keeping this objective in view, the work study assesses the Man Power Requirement Vis – a – vis actual work load of Operating Staff (Group “C & D”) working in TI / TVR section given under:

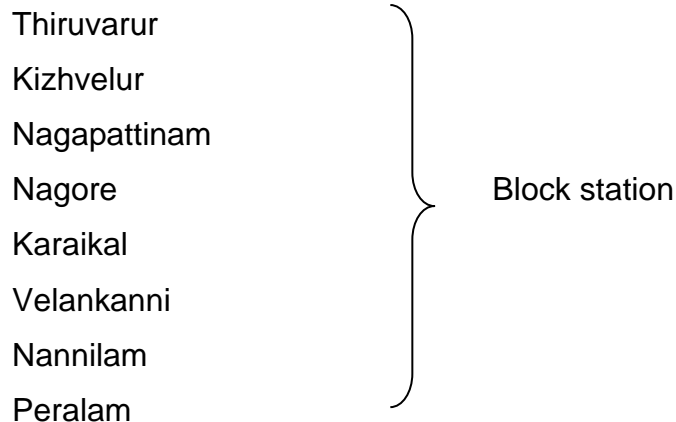
- 3.1.1 The on duty SS/SM are the in-charge and responsible for the safe and efficient and safe train operation as per the Station Working Rules (SWR) of the respective stations and the other Operating Group “D” staff are utilized for platform / station duties and for manning of LC Gates. The Group “D” staffs were in different categories such as Points man, Gatekeeper, Safaiwala, Traffic Porter, Shunting staff, Sweeper-cum-Porter etc., are now called as Points man ‘A’ and Points man ‘B’ and they are all utilized for Station and LC gate duties, Cabin and Platform duty as mentioned in the **Station Working Rules (SWR)** of respective stations.

3.1.2 The study pertains to the workload Vs available traffic staff in TI/TVR section.

Traffic staff engaged in Train operation are given as under:

- i) Station Superintendent.
- ii) Station Master.
- iii) Shunting Master.
- iv) Points man 'A' and
- v) Points man 'B'

3.2 The work study to review the operating staff strength from TVR to KIK, TVR to Peralam and TVR to VLNK and the details of stations where operating staff are deputed is as follows.



3.3 Duties of Station Manager:

- Effective Supervision of all operating staff.
- Regular Inspection of Records, Authorities and Registers maintained at various locations under his jurisdiction.
- Ensure that the staff are trained as required, that they are not overdue for Refresher course, Safety camp and PME and that their declarations, Block competency certificate, medical fitness certificate, Panel competency certificate are current, before they are drafted for studies.
- Counseling the sub-ordinate staff in safe and efficient working.
- Arranging staff and ensuring availability of required equipment, books and forms etc. at the station.
- Maintaining effective co-ordination with staff of other department.
- Ensuring that all information to public is displayed in station

3.4 **Station Master:**

- Arranging safe and punctual reception and dispatch of trains.
- Maintaining caution order Registers, Preparation and issue of caution orders for all Up & Dn trains.
- Maintaining Co-ordination with the office of the Rolling stock for punctual and efficient train operations.
- Arranging proper display of the train indication boards.
- Ensuring that the essential equipments are kept in good working condition
- Carrying out the duties of SMs on duty during his absence.

3.5 **Shunting Master:**

- Formation and placement of train rakes as and when necessary.
- Removal of train rakes and placement in various sidings as required.
- Performing shunting operations as per the instructions of the platform SM on duty and in consultation with the CSM in-charge.
- Securing vehicles when detained on running lines/sidings so that they will not gain momentum and getting out of control.
- Ensuring proper display of correct hand signals during shunting operations.

3.6 **Points man 'A' & 'B' :**

- Handing over the caution order, authority etc to the loco pilots & guards whenever required.
- Assisting the person-in-charge of shunting during shunting operations.
- Carrying out any other duties issued by the concerned station master & cabin station master and the shunting master in connection with train operations.
- Maintaining cabin panel and other essential equipments well cleaned and dry.
- Cleaning of points with graphite powder.
- Exchanging All Right signals with GLPs.
- Prompt closing and opening of Level crossings.
- Protecting the lines in the event of any obstruction at the Level crossings.
- Keeping all the essential equipments at the LC in good working condition.
- Keeping the Flange ways clean.

- Attending all the trains from the gate lodge side and reporting to SM in case of anything unusual and unsafe condition noticed in the passing train in addition to taking other steps to prevent any accident.
- Reporting to SM on duty for early rectification in case of any failure of level crossing, interlocking, telecommunication and warning system.

3.7 **Other regular works carried out by station masters:**

- Public address system by way of announcements and verbal in regard to arrival/departure of trains.
- Switch `ON` of Destination boards.
- Preparatory work in regard to Run over cases.

3.8 **Train Clerks:**

- ❖ Maintenance of LTM Register.
- ❖ Maintenance of Vehicle Register.
- ❖ R & D of TUs and Empties.
- ❖ Preparation and despatch of PCDO statements (Once in 10 days and Monthly).

3.9 **Commonly maintained registers:**

- Power Block Register
- Line Block Register
- Caution Order Register
- Train signal register
- S&T NM Register
- Movement Register for Points man booked for shunting operations in Sidings.
- Signal failure message register.
- Inspection register/officers & TI
- Standing order Book (SOB)
- Accident register
- Station Working Rules (SWR)
- Patrol Beat Book
- Attendance register
- Leave/CR register
- Night Duty Allowance register
- Point cleaning register
- Safety meeting register

- Late train report (LTM)
- Signal Post Telephone register (SPT)
- Weather warning register
- Pass/PTO declaration/Issue register
- Guard's order Book
- Private number exchange register (PN)

3.10 TI/TVR is the overall supervisory control of operating staff of the section. The duty hours of SS/SM's of TVR, KVL, NGT, NCR, KIK, VLNK, NNM & PEM is 10-20, 06-10, 20-24, 00-06 (Continuous), and for the category of Points man 'A' and 'B' it is EI roster 08-20, 20-24, 00-08 except TVR station.

3.11 **REQUIREMENT OF MAN POWER AT EACH STATION:**

The assessment of Manpower is arrived on the Basis of SWR & HOER. The requirement of manpower is arrived not only on the basis of existing roster but also on need base. The provision of RG and LR will be given, while calculating the total strength of TI/TVR section.

The TI/TVR section having 8 stations including two junction station of TVR & NGT. Hence, the work study team has bifurcated the two Junction stations of TVR & NGT as one part and other stations viz., KVL, VLNK, NCR, KIK, NNM & PEM as one part for calculation of staff strength.

3.11.1 THIRUVARUR (TVR)

General location: Thiruvavarur junction with a code TVR is a B-Class station interlocked to Standard-II (R) on the TPJ-TJ-NGT-KIK single line 'E' route non-electrified, BG section. It is situated at a distance of 54.06 Km from TJ with a branch line to Mayiladuthurai and Karaikudi. Points (except locally operated) and signals are operated from a control panel provided in the RRI cabin. There are three block stations on either side i.e., Kizhvelur (KVL) in NGT side, Nannilam (NNM) in MV side and Kulikarai (KU) in TJ side.

SWR particulars:

No.T.127/TVR Date: 01.08.2018

B - Class station at 38.613 Km from MV and 54.06 Km away from TJ.

Train working staff in each shift as per SWR in chapter -6

- 1) One SS as Supervisory duty.
- 2) One cabin duty Station Master (Panel operating) in RRI cabin in continuous roster
- 3) One cabin duty Station Master (Block operator) in RRI cabin in continuous roster.
- 4) One Station Master on duty at Platform.
- 5) One Shunting Master in continuous roster
- 6) Two Pointsman in continuous roster at PF for Shunting operation.
- 7) Two Pointsman one each at PF and Cabin to assist PF SM & Cabin SM.
- 8) One Pointsman/GK each for LC No.33,36 & 34A in E.I. roster.

Therefore, the requirement of manpower calculation based on the SWR and need base, if required in this station is tabulated as under.

Staff requirement of SS/SM at TVR:

Category	San	Act	Duty	Minimum staff/shift	Minimum staff/day	Methodology
SS	14	12	General supervision	-	1	On need base
			Platform	1	3 (1x3)	SWR
SS/SM			Panel	1	3 (1x3)	SWR
			Block	1	3 (1x3)	SWR
Total	14	12	-	3	10	
RG at 16.66%	RG provision is given for shift SM/SS only				2	
Sub-Total					12	
LR at 16.66%	1.9 say as 2				2	
Total Requirement of TVR SS/SM					14	

Staff requirement of Shunting Master/Pointsmen:

Category	San	Act	Duty	Minimum staff/shift	Minimum staff/day	Methodology
Shunting Master-II	0	1	All shunting movement	2	6 (3 x 2)	Need base
Pointsmen	29	24	To assist SM on Platform	1	3 (1 x 3)	SWR
			To assist SM on Cabin	1	3 (1 x 3)	SWR
			LC No.33,36 & 34A	3	6 (3 x 2)	SWR
Sub-Total	29	25	-	7	18	
RG at 16.66%					3	
Sub-Total					21	
LR at 16.66%					3.5	
Total rounded off to					25	

Average no. of shunting movements per day is 8 and average movement per week is 2. During the shunting movement any assistant/emergency if required the PM working in Cabin/PF may be utilized. The above table shows that the actual strength and calculated man power by work study are same as 25. The roster so far followed as continuous for LC gates may be switch over to the approved roster of E.I. in future.

3.11.2 KIZHVELUR (KVL)

General location: Kizhvelur station with a code KVL is a B-Class station interlocked to Standard-II (R) on the TPJ-TJ-NGT-KIK single line, 'E' route non-electrified BG section. It is situated at a distance of 66.18 Km from TJ. Points (except locally operated) and signals are operated from a control panel provided in SM's cabin. There are two block stations on either side i.e., Nagapattinam (NGT) in up direction and Thiruvarur Junction (TVR) in down direction.

SWR particulars:

No.T.187/KVL Date: 01.01.2017.

B - Class station at 66.18 Km from TJ.

Train working staff in each shift as per SWR in chapter -6

- 1) One duty Station Master (Panel operating) in continuous roster.
- 2) One Pointsman in continuous roster at PF.
- 3) One Pointsman/GK each for LC No.40 & 41 in E.I roster.

Therefore, the requirement of manpower calculation based on the SWR and need base, if required in this station is tabulated as under.

Category	Sanc	Act	Duty	Minimum staff/shift	Minimum staff/day	Method of study
SS/SM	4	4	Panel/Block	1	3 (1 x 3)	SWR
Total	4	4	-	1	3	-
Pointsmen	7	7	One PM at PF	1	2 (1 x 2)	SWR
			LC No.40 & 41	2	4 (2 x 2)	SWR
Total	7	7	-	3	6	-

3.11.3 NAGAPATTINAM (NGT)

General location: Nagapattinam Junction with a code NGT is a B-Class station interlocked to Standard-II (R) on the TPJ-TJ-NGT-KIK single line 'E' route non-electrified BG section. It is situated at a distance of 77.43 Km from TJ with a branch line to Velankanni (VLNK). Points (except locally operated) and signals are operated from a control panel provided in the RRI cabin. There are three block stations on either side i.e., Kizhvelur (KVL) in TVR side, Nagore (NCR) in NCR side and Velankanni (VLNK) in VLNK side.

SWR particulars:

No.T.189/NGT Date: 23.04.2018

B - Class station at 77.43 Km from TJ.

Train working staff in each shift as per SWR in chapter -6

- 1) One SS on Supervisory duty.
- 2) One cabin duty Station Master (Panel operating) in RRI cabin in continuous roster
- 3) One duty Station Master on Platform duty in continuous roster.
- 4) Two Pointsman in continuous roster at PF.
- 5) One Pointsman at Cabin in E.I. roster.
- 6) One Pointsman/GK each for LC No.47 & 48 in E.I roster.

Therefore, the requirement of manpower calculation based on the SWR and need base, if required in this station is tabulated as under.

Staff requirement of SS/SM at NGT:

Category	Sanc	Act	Duty	Minimum staff/shift	Minimum staff/day	Methodology
SS/SM	9	9	General supervision	-	1	On need base
			Panel	1	3	SWR
			Block	1	3	SWR
Total	9	9	-	2	7	
RG at16.66%	RG provision is given for shift SM/SS only				1	
Sub-Total					8	
LR at 16.66%	1.3 say as 1				1	
Total Requirement of SS/SM					9	

The above table shows that the sanction strength and the calculated manpower by work study are same.

Staff requirement of Shunting Master/Pointsmen:

Category	San	Act	Duty	Minimum staff/shift	Minimum staff/day	Methodology
Shunting Master-II	1	0	All shunting movement	2	4 (2 x 2)	On need base
Pointsmen	16	13	To assist SM on PF	1	2 (1 x 2)	SWR
			To assist SM on Cabin	1	2 (1 x 2)	
			LC No.47 – 'C' class	1	2 (1 x 2)	SWR
			LC No.48 – Spl. class	1	3 (1 x 3)	SWR
Sub-Total	17	13	-	6	13	
RG at 16.66% is 2.16 say as 2					2	
Sub-Total					15	
LR at 16.66% is 2.49 say as 3					3	
Total rounded off to					18	

Average no. of shunting movements per day is 7. During the shunting movement any assistant/emergency if required the PM working in Cabin/PF may be utilized. The above table shows that the sanction strength is less than the calculated man power by work study.

3.11.4 VELANKANNI (VLNK)

General location: Velankanni station with a code VLNK is a B-Class station interlocked to Standard-II (R) on the TJ-NGT-VLNK single line, 'E' route non-electrified BG section. It is a terminal station situated at a distance of 10.127 Km from NGT. Points (except locally operated) and signals are operated from a control panel provided in SM's office. There is a block station one side i.e., Nagapattinam (NGT) in up direction.

SWR particulars:

No.T.188/VLNK Date: 10.05.2010.

B - Class station at 10.127 Km from NGT.

Train working staff in each shift as per SWR in chapter -6

- 1) One duty Station Master (Panel operating) in continuous roster.
- 2) One Pointsman in continuous roster at PF.
- 3) One Pointsman/GK for LC No.7 in E.I roster.

Therefore, the requirement of manpower calculation based on the SWR and need base, if required in this station is tabulated as under.

Category	Sanc	Act	Duty	Minimum staff/shift	Minimum staff/day	Methodology
SS/SM	4	4	Panel/Block	1	2 (1 x 2)	SWR
Total	4	4	-	1	2	-
Pointsman	9	5	One PM at PF	1	2 (1 x 2)	SWR
			LC No.7	1	2 (1 x 2)	SWR
Total	9	5	-	2	4	-

3.11.5 NAGORE (NCR)

General location: Nagore station with a code NCR is a B-Class station interlocked to Standard-II (R) on the TPJ-TJ-NGT-KIK single line 'E' route non-electrified BG section. It is situated at a distance of 84.57 Km from TJ. Points (except locally operated) and signals are operated from a control panel provided in the SMs office. There are two block stations on either side i.e., Nagapattinam (NGT) in Down direction and Karaikal (KIK) in Up direction.

SWR particulars:

No.T.192/NCR Date: 27.01.2011.
B - Class station at 84.57 Km from TJ.

Train working staff in each shift as per SWR in chapter -6

- 1) One SS on Supervisory duty each at NCR and KIKP siding.
- 2) One cabin duty Station Master Platform duty in continuous roster.
- 3) Two Pointsman in continuous roster at PF.
- 4) One Pointsman/GK each for LC No.62,63 & 64 in E.I roster.

Therefore, the requirement of manpower calculation based on the SWR and need base, if required in this station is tabulated as under.

Category	Sanc	Act	Duty	Minimum staff/shift	Minimum staff/day	Method of study
SS	7	7	Supervisory at NCR & KIKP	-	2	General Shift
SS/SM			PF & Panel	1	3 (1 x 3)	SWR
Total	7	7	-	1	5	-
Pointsman	13	13	PF duty	2	4 (2x 2)	SWR
			LC No.62 & 63 – 'C' class	1	4 (2 x 2)	SWR
			LC No.64 – Spl. class	1	3 (1 x 3)	SWR
Total	13	13	-	4	11	-

3.11.6 KARAIKAL (KIK)

General location: Karaikal station with a code KIK is a B-Class station interlocked to Standard-II (R) on the TPJ-TJ-NGT-KIK single line 'E' route non-electrified BG section. It is a terminal station situated at a distance of 95.527 Km from TJ. Points (except locally operated) and signals are operated from a control panel provided in the SMs office. There is a block station i.e., Nagore (NCR) in Down direction from TVR side.

SWR particulars:

No.T.189/KIK Date: 06.01.2011.

B - Class station at 95.527 Km from TJ.

Train working staff in each shift as per SWR in chapter -6

- 1) One duty Station Master at Platform in continuous roster.
- 2) Two Pointsman in continuous roster at PF.
- 3) One Pointsman/GK each for LC No.69, 70 & 71 in E.I roster.

Therefore, the requirement of manpower calculation based on the SWR and need base, if required in this station is tabulated as under.

Category	Sanc	Act	Duty	Minimum staff/shift	Minimum staff/day	Methodology
SS/SM	5	5	PF & Panel	1	3 (1 x 3)	SWR
Total	5	5	-	1	3	-
Pointsman	8	15	PF duty	2	4 (2 x 2)	SWR
			LC No.69,70 & 71	3	6 (3 x 2)	SWR
Total	8	15	-	5	10	-

The above table shows that the sanction strength is less than the calculated man power by work study.

3.11.7 NANNILAM (NNM)

General location: Nannilam station with a code NNM is a B-Class station interlocked to Standard-II (R) on the TVR-MV single line, 'D' route non-electrified BG section. It is situated at a distance of 23.65 Km from MV. Points (except locally operated) and signals are operated from a control panel provided in SM's office. There are two block stations on either side i.e., Peralam (PEM) in up direction and Thiruvarur Junction (TVR) in down direction.

SWR particulars:

No.T.117/NNM Date: 03.04.2017.

B - Class station at 23.65 Km from MV.

Train working staff in each shift as per SWR in chapter -6

- 1) One duty Station Master (Panel operating) in continuous roster.
- 2) One Pointsman in continuous roster at PF.
- 3) One Pointsman/GK for LC No.22 in E.I roster.

Therefore, the requirement of manpower calculation based on the SWR and need base, if required in this station is tabulated as under.

Category	Sanc	Act	Duty	Minimum staff/shift	Minimum staff/day	Method of study
SS/SM	4	4	Panel/Block	1	3 (1 x 3)	SWR
Total	4	4	-	1	3	-
Pointsman	7	7	One PM at PF	1	2 (1 x 2)	SWR
			LC No.22	1	2 (1 x 2)	SWR
Total	7	7	-	2	4	-

3.11.8 PERALAM (PEM)

General location: Peralam station with a code PEM is a B-Class station interlocked to Standard-II (R) on the TVR-MV single line, 'D' route non-electrified BG section. It is situated at a distance of 66.18 Km from TJ. Points (except locally operated) and signals are operated from a control panel provided in SM's cabin. There are two block stations on either side i.e., Mayiladuthurai (MV) in up direction and Nannilam (NNM) in down direction.

SWR particulars:

No.T.110/PEM Date: 01.01.2019.

B - Class station at 15.68 Km from MV.

Train working staff in each shift as per SWR in chapter -6

- 1) One duty Station Master (Panel operating) in continuous roster.
- 2) One Pointsman in continuous roster at PF.
- 3) One Pointsman/GK each for LC No.15 & 16 in E.I roster, but work study team has allowed 3 staff for LC No.16 as the same is Special Class in Continuous Roster.

Therefore, the requirement of manpower calculation based on the SWR and need base, if required in this station is tabulated as under.

Category	Sanc	Act	Duty	Minimum staff/shift	Minimum staff/day	Methodology
SS/SM	4	4	Panel/Block	1	3 (1 x 3)	SWR
Total	4	4	-	1	3	-
Pointsman	13	8	One PM at PF	1	2 (1 x 2)	SWR
			LC No.15 - B2 Class	1	2 (1x 2)	SWR
			LC No.16 – Spl. Class	1	3 (1 x 3)	SWR
Total	13	8	-	3	7	-

3.12 Summary of Junction Stations of TVR & NGT - Sanction Vs Requirement of SS/SMs.

Station	Sanction	Actual	Requirement	Surplus
TVR	14	12	14	0
NGT	9	9	9	0
Total	23	21	23	0

For the Junction Stations of TVR & NGT, RG & LR has already been given vide Para No.3.11.1 & 3.11.3 respectively. The sanctioned strength and calculated strength by work study team are same. **Being TI/TVR is Zonal Hqrs. for TI/TVR section, the L.R. provided as 4 vide para 3.14 for other 6 stations may be operated from TVR.**

3.13 Summary of Junction Stations of TVR & NGT - Sanction Vs Requirement of Sh. Master & Pointsmen 'A' & 'B'

Station	Sanction	Actual	Requirement	Surplus/Shortage
TVR	29	25	25	4 (Surplus)
NGT	17	13	18	1 (Shortage)
Total	46	38	43	3 Surplus

For the Junction Stations of TVR & NGT, RG & LR has already been given vide Para No.3.11.1 & 3.11.3 respectively. **Being TI/TVR is Zonal Hqrs. for TI/TVR section, the L.R. provided as 8 vide para 3.15 for other 6 stations may be operated from TVR.**

Recommendation No. 1

3 posts of Pointsmen 'B' with Grade Pay Rs.1800/- in Level 1 is found excess to the requirement at TVR Junction, the same may be surrendered and credited to the Vacancy Bank.

(3 posts)

3.14 Summary of Sanction Vs Requirement of SS/SMs (6 stations)

Station	Sanction	Actual	Staff Requirement
KVL	4	4	3
VLNK	4	4	2
NCR	7	7	5
KIK	5	5	3
NNM	4	4	3
PEM	4	4	3
Sub-total	28	28	19
RG @ 16.66% of 19 3.2 say as 4			4
Sub-total			23
LR @ 16.66% of 23 3.8 say as 4			4
Total			27

The sanctioned strength is more than the calculated strength by work study team. As there is no night service in VLNK.

Recommendation No. 2

1 post of SMs with Grade Pay Rs.4200/- in Level 6 is found excess to the requirement at TVR Junction, the same may be surrendered and credited to the Vacancy Bank.

(1 post)

3.15 Summary of Sanction Vs Requirement of Shunting Master & Pointsmen

‘A & ‘B’ (6 stations):

Station	Sanction	Actual	Staff Requirement
KVL	7	7	6
VLNK	9	5	4
NCR	13	13	9
KIK	8	15	12
NNM	7	7	4
PEM	13	8	7
Sub-Total	57	55	42
RG @ 16.66% 6.99 say as 7			7
Sub-total			49
LR @ 16.66% 8.1 say as 8			8
Total			57

It is seen from the above table, the sanctioned strength and calculated strength of work study team both are same and hence the work study team allowed to continue the above sanction/actual.

3.16 Sanction Vs Requirement (Category wise)

Sl. No.	Category	San.	Act.	Minimum Requirement including RG & LR	Surplus
1	SS/SM	51	49	50	1
2	SH.M/ PM 'A' & 'B'	103	93	100	3
TOTAL		154	142	150	4

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CHAPTER – IV**4.0 PLANNING BRANCH'S REMARKS ON CO-ORDINATING OFFICER'S VIEWS****1) Co-ordinating Officer's Views:**

TI/TVR section (For SSs/SMs at TVR, KVL, NGT, VLNK, NCR, KIK, NNM & PEM)

- 1 post of SM in Level 6 (GP Rs.4200/-) was identified as Surplus, out of 51 posts.
- The bare requirement : 33 posts
- RG @ 16.66% : 5.5 posts
- LR @ 25% : 9.625 posts
- Supervisory posts : 3 posts
(TVR, NGT, NCR)
- Total Requirement : 51.125 posts or 51 posts
(Actual Sanction 51 posts)

Remarks:

- 1) Higher percentage of LR @ 25% or 1.925 posts extra) is required, in view of the availability of four major loading points (NCR, NGT, TVR & PEM). These stations contribute 67.029% of the Division's loading in the last FY (6.73 MT out of the total loading of 10.04 MT). Further, the Stations available in this Section are situated in two diverging junction points (Section map enclosed) and hence the movement of Staff in any short notice will be difficult.
- 2) Scheduled weekly train T. No.17316 VLNK – VSG Express is already in operation, during night hours. Further, long distance Special trains are running at regular intervals and running of regular trains are in the pipe line, which requires round the clock working at VLNK. Hence, the Staff requirement at VLNK is four, including RG and LR.
- 3) As the inter-distance of stations available in the section is more than 8 KM, to minimize Travelling Allowance for staff, the RG / LR posts are kept at the individual stations itself.
Hence, the existing sanction of 51 in this Section is justifiable only.

Planning Branch Remarks:

LR was allowed at the maximum of 20% in previous studies. For example, 1) Work study No.G.275/WSSR/201617/2016-17 of TI/NCJ section in TVC division. 2) Work study No.G.275/WSSR/181819/2018-19 of TI/TCR section of TVC division. In view of the CO's remarks the work study team has recalculated the requirement of man power as given below:

The bare requirement	:	33 posts
RG @ 16.66%	:	5.5 posts
Sub-Total	:	38.5 posts
LR @ 20%	:	7.7 posts
Supervisory posts(TVR, NGT, NCR)	:	3 posts
Total Requirement	:	49.2 say 49 posts

Revised Sanction Vs Requirement for TI/TVR (For SS/SM at TVR, KVL, NGT, VLNK, NCR, KIK, NNM & PEM)

Station	Sanction	Actual	Requirement	Surplus
SS/SM	51	49	49	2

As per CO's remarks for the stations working under TI/TVR the bare requirement of 33 taken for revised requirement with RG and LR are 5.5 and 7.7 respectively and hence rounded of the total of 49 including 3 Supervisors at TVR, NGT and NCR.

Revised Recommendation:

1 post of SS with Grade Pay Rs.4600/- in Level-7 and 1 post SM with Grade Pay Rs.4200 in Level-6 are found excess to the requirement at TI/TVR section the same may be surrendered and credited to the Vacancy Bank.

(2 posts)

2) Co-ordinating Officer's Views:

TI/TVR section : (For SHM/Pointsman at TVR)

- 3 posts of Pointsman – B were identified as Surplus, out of 29 posts.
 - The bare requirement : 21 posts
 - RG @ 16.66% : 3.5 posts
 - LR @ 20% : 4.9 posts
- Total requirement : 29.4 posts or 29 posts
(Actual sanction : 29 posts)

Remarks:

- 1) It was recommended to utilize only 2 staff for shunting movement, against the SWR (which has got the approval of CRS) provisions of 3 staff. Since, it is a Safety issue and involves rake Shunting every often, employing 3 staff for shunting is justifiable.
- 2) The suggestion of utilizing the Staff from EI Cabin or Platform is not possible, as these staff will be engaged in activities of their respective domain and will not be available for Shunting at all the times.

Hence, the existing sanction of 29 is justifiable only.

In view of the above facts and considering the quantum of Coaching and Freight activities, it is not possible to surrender the identified posts (one post of SM in Level 6 in the TI/TVR section and three posts of Pointsman-B at TVR). To ensure safe and seamless train operations, the continuance of the existing sanction in this section is to be maintained.

Planning Branch Remarks:

Agreed. However, comparing to SM cadre, for the erstwhile Group 'D' staff, less no. of days for RC, PME, other station related programmes and also accompanying higher officials etc., Therefore, the LR allowed for erstwhile Group 'D' staff as 16.66% is stands good.

Revised Recommendation: NIL**Revised Sanction Vs Requirement (Category wise)**

Sl. No.	Category	San.	Act.	Minimum Requirement including RG & LR	Surplus
1	SS/SM	51	49	49	2
2	SH.M/ PM 'A' & 'B'	103	93	103	0
TOTAL		154	142	152	2

Therefore, 1 post of SS (Level-7) and 1 post of SM (Level-6) (Total 2 posts) may be surrendered and money value credited to vacancy bank.

CHAPTER - V**5.0 FINANCIAL SAVINGS**

- 5.1 If the recommendation made in the study report is implemented, the annual recurring financial savings will be as under:

Sl. No.	Category	Grade Pay/Level	No. of Posts	Money value	Annual Financial savings
1	SS	Level – 7 (GP 4600)	1	104888	1258656
2	SM	Level – 6 (GP 4200)	1	82768	993216
		TOTAL	2		2251872

Annexure - I

Consolidated SAVE Statement of TI/TVR by DPO/TPJ & TI/TVR as on 01/06/2019						
S. No.	Category	Grade Pay (Rs.)	Sanction	Actual	Vacancy	Excess
1	SS	4600	18	16	2	0
2	SM	4200	33	32	1	0
3	SH.MASTER	1900	1	3	0	2
4	POINTS MAN 'A'	1900	46	38	8	0
5	POINTS MAN 'B'	1800	56	54	2	0
	Total		154	143	13	2

