

STORES MANAGEMENT SYSTEM

MANUAL

Incorporated Vide
G.O.O.No.667/GM (A)/2003, dated: 05-03-2004



ANDHRA PRADESH POWER
GENERATION CORPORATION LIMITED

Vidyut Soudha: :Hyderabad – 500 082



ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED

Vision

- To be the best Power Utility in the Country and one of the best in the World.

Mission

- To generate and supply adequate and reliable power in the State of Andhra Pradesh in the most economic manner.
- To spear-head accelerated economic power development by planning and implementing new power projects within stipulated cost and time.
- To implement Renovation & Modernization of all existing units and enhance their performance.
- To operate power stations economically, efficiently and eco-friendly.

Core Values

- Excellence in all aspects of the Company
- Honesty, integrity and ethical business
- People as the source of strength
- Respect for the individual and personal growth
- Tackling challenges and solving problems
- Continued self-improvement, never being satisfied

ANDHRA PRADESH POWER GENERATION CORPORATION LIMITED
ABSTRACT

APGENCO – Approval of Stores Management System Manual – Orders – Issued.

 G.O.O.No 667/GM(A)/2003

Date 05.03.2004
 Read the following:

1. G.O.O.No. 421/CE(Commercial)/2002, Dated 31.10.2002.
2. G.O.O.No. 270/GM(A)/2003, Dated 24.07.2003.
3. G.O.O.No. 467/GM(A)/2003, Dated 28.10.2003.

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ORDER:

The APGENCO has been following the Rules, Regulations Polices and procedures of the erstwhile APSEB w.e.f. its inception on 01.02.1999, pending formulating its own regulations, Manuals etc,. Cost of materials is the major component of expenditure and this puts greater responsibility for the co-ordinated, planning, sourcing, purchasing, transporting, stocking and controlling the materials in an optimum manner with the objective of effective service and the goal of minimum cost of production. Need was therefore felt to evolve its own policies and procedures on stores Management System Manual.

2) The APGENCO after careful consideration issued orders in the reference first cited entrusting the work of Stores Management System Manual to Sri S.C Sehgal Consultant Material Management, Dehardun, Uttranchal State, to submit report keeping in view, the existing procedures in vogue at various Generating Stations, Headquarters Offices. He has accordingly submitted the draft Stores Management System Manual in two parts namely Volume I consisting of Stores Management System and Volume II consisting procedures of preservation of Stores Materials. A copy of its was circulated to all Heads of Generating Stations and Functional heads at Corporate Office with a request to study the Manual and give their suggestions for improvement. All DEs(Stores) of Generating Stations were invited for a review meeting at Corporate Office and their Opinion was sought for improvement of the Manual.

3) The APGENCO after careful consideration of all aspects approves the “ STORES MANAGEMENT SYSTEM MANUAL” as appended to this orders for implementation.

4) All Executive Directors, Chief Engineers, General managers, FA&CCAs, Superintending Engineers & Deputy CCAs are requested to take action accordingly and implement the procedures contained in Stores Management System Manual scrupulously.

5) These orders shall come into force with immediate effect.

J.PARTHASARATHY
 CHAIRMAN AND MANAGING DIRECTOR

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STORES MANAGEMENT SYSTEM MANUAL

PART - I

Andhra Pradesh Power Generation Corporation Limited
(A Govt. of A. P. Undertaking)
Vidyut Soudha, Hyderabad – 500 082.
Andhra Pradesh.

LIST OF ABBREVIATIONS USED

1	AWB	Advance Way Bill
2	C&DG	Clearance & Despatch Group
3	CIF	Cost Including Freight
4	DC	Delivery Challan
5	DCSRV	Direct Charging SRV
6	EDP	Electronic Data Processing
7	FOR	Free on Rails
8	GP	Gate Pass
9	JIT	Just in Time
10	LOI	Letter of Intent
11	LR	Lorry Receipt
12	MIR	Material Inward Register
13	MIS	Management Information System
14	OEM	Original Equipment Manufacturer
15	OES	Original Equipment Supplier
16	PO	Purchase Order
17	PWB	Permanent Way Bill
18	RPP	Registered Post Parcel
19	ROS	Release Order for Scrap
20	RR	Railway Receipt
21	SIV	Stores Requisition-cum-Issue Voucher
22	SOS	Sale Order for Scrap
23	SRN	Stores Return Note
24	STN	Stores Transfer Note
25	SRV	Stores Inspection-cum-Receiving Voucher
26	UR	Unloading Report

CHAPTER-1

PREAMBLE

1. Preamble

- 1.1 After restructuring of Andhra Pradesh Electricity Board, Andhra Pradesh Power Generation Corporation Limited is entrusted with the responsibility of making available reliable, quality and most economical generation of power commensurate with demand present as well as prospective by achieving consistently high Plant Load Factor and adding new capacities. In view of these challenges it is felt to evolve policies and procedures for various management and operating functions, including Materials Management so as to keep a track of fast changing supply position in the market. As the first step in the direction, Purchase Management System Manual and Purchase Policy have been approved and under implementation. The next important function in supply chain is Stores Management and hence this Manual.

Stores Functions have a very important role in making available critically required stores and spares for efficient and economical operation and maintenance. Stores in fact are considered as backbone of maintenance of equipment.

Efficient and effective services to the user shall be the principal objective of stores Management and this shall be the most important parameter to judge its performance. It is, however, equally desirable to provide these services as economically as possible i.e. to keep the stock level at optimum, conserve and preserve them properly so that both financial and operative objectives are attained.

1.2. **Keeping in view the above, Stores Management System Manual is formulated which shall provide**

- a) A standard reference to personnel responsible for stores management functions. All the formats and records used in Stores have been standardized and form part of this manual (Appendixes). Due to this standardization, personnel responsible for Stores functions can be trained more effectively on continuous basis.
- b) Physical part of Stores management being an important aspect, 'Guidelines for Materials Preservation, Materials Handling, Safe Operations and Construction of Storehouses and Stockyards' have been enumerated in this Manual so as to ensure safe and proper storage of materials, some of which may remain in the stock for many years (items like Insurance spares). Quite a number of materials handling equipment are used in store operation and in view of this causes of accident and precautions for prevention have been enumerated for the benefit of those who are involved in these operations.
- c) A readily accessible form of complete records of all standing instructions.

- d) Uniform procedure implemented at all the business units. The personnel working in Stores thus become accustomed to policies and procedures followed in the organization. This shall further facilitate smooth inter-unit transfers. The new entrants in the department can also be taught, in least time, policies and procedures under which they are expected to act.
 - e) Easy methods of evaluating and comparing the efficiency/performance of stores functions at various business units, since they shall be operating on the same system.
 - f) Substantial saving in printing of standardized stores formats, records and registers and also improved availability.
 - g) In case of any doubt on any aspect of operating stores, those can be clarified and authenticated with the help of this Manual.
 - h) Help in defining each function of stores management and render assistance in proper supervision and appraisal.
- 1.3 The Manual shall further facilitate maximum amount of standardization of procedures and related paper work as these have been formulated after a lot of deliberation and review. In view of this, it is expected that manual will be found most satisfactory and economical in operation by providing desired flow of materials.
- 1.4 The procedures contained in the Manual are finalized in consultation with concerned Departments and are expected to fit to the requirements of those departments and provide them satisfactory service level.
- 1.5 A unique experimental method of Issue of Materials on Spot-Delivery basis by Stores Personnel is envisaged in article 5.10 and is proposed for implementation at one of the Power Stations on trial basis which will save the time of the maintenance engineers during grave emergencies and inculcate a habit of involvement among Stores Personnel since the Principle Objective of the Stores is to render service to the user departments.
- 1.6 The Delegations of Powers approved vide G.O.O.No.273/GM(ADM)/2003, Dated 24.07.2003 is appended to this Manual. Divisional Engineer (Stores) can exercise the powers delegated to the Divisional Engineers in respect of activities related to stores functioning except for procurement action.

CHAPTER-2

RESPONSIBILITIES AND FUNCTIONS OF STORES

2. Objectives, Responsibilities and Functions of Stores

2.1 Objectives of Stores Management

As emphasized earlier, services to the user departments is the principal objective of stores functions. It is, however, obviously desirable to provide the services as economically as possible. Frequently, but not always, the most important consideration is to keep the stock value at the lowest practical level to economize in the use of working capital, which is most of the time scarce, and to minimize the cost of storage. It implies that there is some conflict between the need for efficient and effective services and the need to economize in stock-holdings. On the one hand, the more stock held, the easier it is to have items available on demand, on the other hand, larger the stock held, greater the cost, though of course ordering very frequently in order that holding cost may be kept low can itself lead to high cost. It is, therefore, necessary to seek, find and operate a satisfactory compromise between the various opposing costs, i.e. optimizing stock holding in such a way that both operating and financial objectives are attained. At no point of the time, work should suffer for want of critically required materials and at the same time unnecessary funds (working capital) are not blocked in stocks, especially inactive/slow moving items. In addition, the stores department itself should be economically operated with other functions to achieve saving in material and other costs wherever practical. Cost of transportation shall be lowest possible by selecting right mode of transportation and an effective carrier for the given materials. Many items, especially Insurance spares may be required to be kept in stores for years together. It shall, therefore, be essential that proper methods of storage and preservation be applied so that items do not deteriorate, loose some of their properties and become unusable due to atmospheric conditions and biological elements. Another important objective of stores function is to minimize material handling cost, safety being another important consideration.

Objectives of Stores Management as such can be summarized as under:

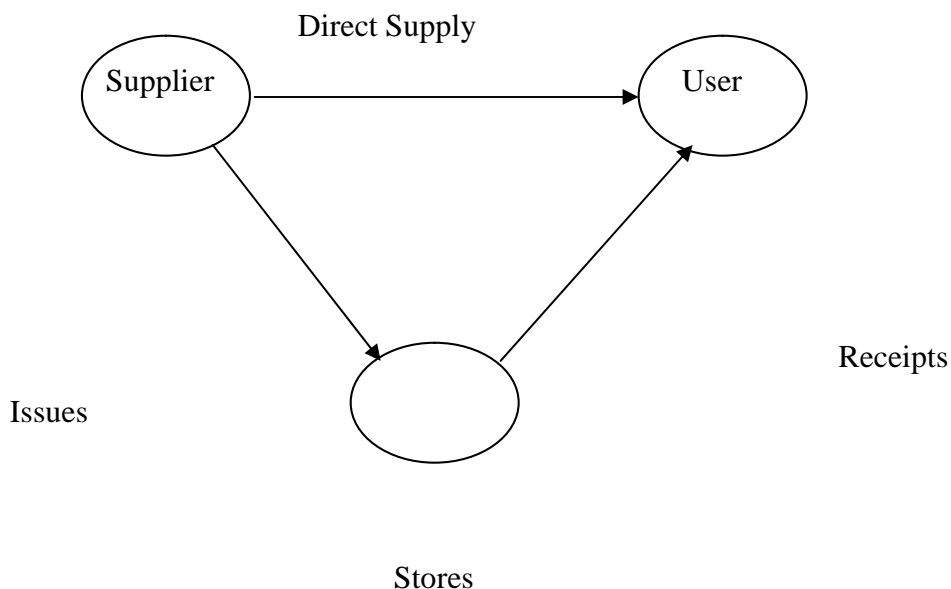
- To provide services to operating functions by balanced flow of raw materials, components, tools and tackles and other consumable materials.
- To provide these services in the most economical manner, keeping the stocks at the optimum level and bringing down inventory holding and ordering costs to the minimum

- To account for all the materials received and issued, proper storage to avoid deterioration and loss of materials, economical material handling, stock verification and reconciliation of discrepancies.
- To receive scrap and other discarded materials and arrange prompt and most economical disposal.
- Maintain proper coordination and cordial relationship with departments.

2.2 Responsibilities

Stores functions are responsible for receipt, custody and issue of very large sum of money in the form of goods and for determination of appropriate quantities of materials to meet operational needs in most economical manner. Stores operations provide both service and control functions. First they organize and control flow of materials for Operation and Maintenance and secondly as custodial and controlling agency. It is responsible for safety and physical control of substantial portion of organizations' working capital and finally for many items, the existence of stores permits quantity buying for saving in prices, paper work and handling.

Stores need to be considered as a temporary location of materials for operation purposes and should be planned, organized and operated in such a way that period of residence of each item is shortest possible, consistent with economic operations. Since supply cannot be exactly matched with demand, we have to carry operating stock.



The above figure shows that a single transaction in direct supply replaces three Operations- Receipt- Stores- Issue. One activity replaces three.

Obsolete, redundant and surplus materials are simply money sitting on a shelf, requiring more money to be spent on its custody. Rapid adoption of Just in Time (JIT)

approaches in recent years reflected the general awareness that stocks are expensive to hold. When demand is highly unpredictable then storage for longer period may be necessitated.

The non-availability of materials, when needed may result in huge losses, by way of loss of generation of power and profit, idle time cost of manpower, loss of good-will etc. Stores functions as such are treated as back - bone for efficient and effective operation and maintenance in Power Stations.

2.3. Functions of Stores.

Following are the broad functions of stores management.

2.3.1. Receiving and Despatch:

All the incoming materials from the suppliers and other units of the organization shall be received at stores. Arrangement need to be made for transportation, unloading and receiving of materials, and handing over the same to custody group checking up of packages, checking up materials with details of invoices and purchase order, identifying discrepancies, if any, record keeping, preparation of Stores Receiving cum Inspection Report, and for arranging despatches of materials- returned to suppliers, sent for repair or transferred to other units of the organization. Claims for short delivery, non-delivery or damages en- route are required to be lodged in time with the underwriters, carriers and suppliers as per the provision of contracts. Replacement supplies need to be arranged for above losses and also for technical rejections (supply of wrong or substandard materials by the suppliers)

2.3.2. Inspection of Materials

It has to be ensured that every item received in stores is checked from quality angle. Any failure of poor quality materials may put the organization to heavy losses, especially, those of components of vital equipment. Quality plans need to be developed for critical and high consumption value items. Inspection can be carried out by independent Quality Assurance Group or by user department or by third party, depending upon the set up. Stores, however, is required to maintain continued and sustained liason with inspection people for prompt inspection.

2.3.3. Issue of materials & maintenance of records:

Stores department, on receipt of requisition/indent from user departments shall identify requirements and issue materials without any delay. Proper records need to be made of issue and receipt documents.

2.3.4. Warehousing and preservation:

All materials received from Receipt Section shall be stacked properly and bin location recorded to facilitate issues. Necessary steps need to be taken for preservation of materials especially those, which are to be stored for longer period. Preservation methods need to be developed in consultation with suppliers/user departments. Steps also need to be taken for security and safety of materials and also safety of personnel from various hazards by taking precautions in handling the materials.

2.3.5. Stock control records:

Day to day receipts and issues shall be posted in stock ledgers or computer master so that the current balances of each item are known without physical counting or checking.

2.3.6. Identification and disposal of scrap, obsolete and surplus materials:

All scrap arising, worn-out and unusable spares etc. shall; be received in scrap yard and after identification and formation of lots shall be disposed off promptly. Similarly, obsolete and surplus items shall be identified and most economical disposal action is taken.

2.3.7. Physical stock taking/ stock verification:

It has to be ensured that physical stocktaking of each item of stores is done at least once in a year, book balances tallied with ground balances. Discrepancies, if any noticed are properly investigated, reconciled and adjusted.

2.3.8. Identification and codification:

It is also the function of Stores to properly and rationally codify each item of stock, prepare the code catalogues and distribute to all the concerned. This shall involve identification, systematic defining and describing all items, adoption of material specification, unit of measurement, introduction of a degree of standardization and variety reduction. In order to fulfill these functions, stores shall coordinate closely with other departments such as users, Planning, MIS etc.

2.3.9. Inventory control:

This shall involve fixation of inventory levels, safety stock and monitoring availability, watching outstanding quantities, preparing purchase requisitions for items reaching reorder levels, analyzing consumption pattern, identification of surplus and obsolete materials and initiate disposal action. In view of critical requirement of scientific inventory control management, **this function shall be outlined in details in a separate manual i.e. Inventory Management System Manual.**

CHAPTER-3

**ORGANIZATION
OF STORES**

3. Organizational Structure of Stores

In order to perform the functions of Stores Management efficiently and effectively as elaborated under Section 2.3, division of responsibility on functional basis in different groups shall be as under:

3.1. Stores operation shall be divided into three distinct Groups:

- i) Receipt and Despatch Functions
 - (a) Clearance & Despatch
 - (b) Transit Insurance
 - (c) Transport Agencies Contracts
- ii) Custody & Warehousing including inspections
- iii) Materials Planning & Inventory Control

3.1.1. Receipt & Despatch Group

This Group shall be responsible for the following functions

- i) Receipt of despatch documents (RR/PWB/LR etc) and keeping their records
- ii) Collection of consignments from Railways/ Road Carriers
- iii) Taking delivery of consignment brought on door delivery basis.
- iv) Arranging open delivery if consignment found in outwardly damaged conditions or packages delivered short
- v) Receipts recording in 'Materials Inward Register and raising Unloading Reports.
- vi) Handling and handing over materials to custody or user departments
- vii) Process freight payments to the carriers,
- viii) Expediting deliveries of critically required materials
- ix) Securing marine insurance policies and arranging payment of premium to underwriters
- x) Furnishing monthly return of consignments received against the open policy of transit insurance and to ensure availability of sufficient premium amount for the goods in transit
- xi) Expedite settlement of claims on the carriers/underwriters/suppliers.
- xii) Arranging despatch of materials to out-station suppliers or other units of the Corporation.
- xiii) Any other work connected with receiving and despatch work.

3.1.2. Custody, Warehousing and Inspections Group

This Group shall be responsible for the following functions:

- i) Receipt of materials from Receiving & Despatch Group along with the unloading reports, checking of materials with the U.Rs. Arrange inspection and check

measurement by user departments, Generation of Stores Receipt Voucher, Billing, Binning and Ledger posting updating of computer master.

- ii) Issue of materials to user departments, complete issue documentation, ledger posting of Issue Vouchers/ updating of computer master.
- iii) Receive the surplus materials from user departments, binning, posting and maintaining records of Stores Return Note and their accounting.
- iv) Issue of materials for inter-unit transfer, preparation, posting and accounting of Stores Transfer Notes.
- v) To plan and arrange preservation, storage and material handling facilities.
- vi) Facilitate physical stock verification and reconciliation of discrepancies, if any. Preparing and posting of Adjustment Vouchers so as to bring the ground balance in line with book balance, when discrepancies are noticed.
- vii) Receive scrap materials and facilitate disposal action including handing over of such materials to prospective buyers.
- viii) Identify obsolete/surplus items and facilitate disposal action in association with Material Planning & Inventory Control Section.
- ix) Custody of rejected materials and pursuing with the Suppliers for replacement of rejections/ damages/shortages.
- x) Preferring claims with the Carriers/ Under Writers for non-delivery of the consignments and for damages and shortages.

3.1.3. Material Planning & Inventory Control Group:

This group shall be responsible for the following functions:

- i) Identifying regularly/commonly used items with by and large stabilized consumption pattern and declaring them as stock items and fixing their minimum, maximum, reorder level and re-ordering quantities.
- ii) Circulating the details of items declared stock items from time to time so that Purchase Requisitions are not raised by any department other than Stores.
- iii) Keeping a watch on movement of stock items and raising Purchase Requisitions as soon as re-order levels are reached.
- iv) Analyzing lead-times for various categories of items and co-ordination with purchasing for timely availability of materials.
- v) Review of stock holding level from time to time keeping in view the consumption pattern, lead-time and criticality of each item.
- vi) Ensuring that stocks are available for stock items all the times so as to win the confidence of user departments. In case of stock out of an item, supplies against pending

orders, if any, shall be expedited. If any delays are anticipated, arrangement for emergency/cash purchase of the item shall be made to overcome the situation.

- vii) Review of Purchase Requisitions of non-stock items from the user departments.
- viii) Identification of non-moving, surplus and obsolete items and recommend for their disposal action.
- ix) Identifying, defining, and describing all items of stores, including drawing up of specifications and unit of measurement to meet requirements of cataloging and computerization.
- x) Rational codification of all the stores items, preparation and distribution of code catalogues.
- xi) MIS of Stores Management- generation of various reports for management information and review.
- xii) Coordination with Electronic Data Processing (EDP) Department for successful implementation of Computerized Stores Accounting System and interfacing with Price Stores Ledger and Purchase Management.
- xiii) Any other job connected with Materials Planning & Inventory Control.

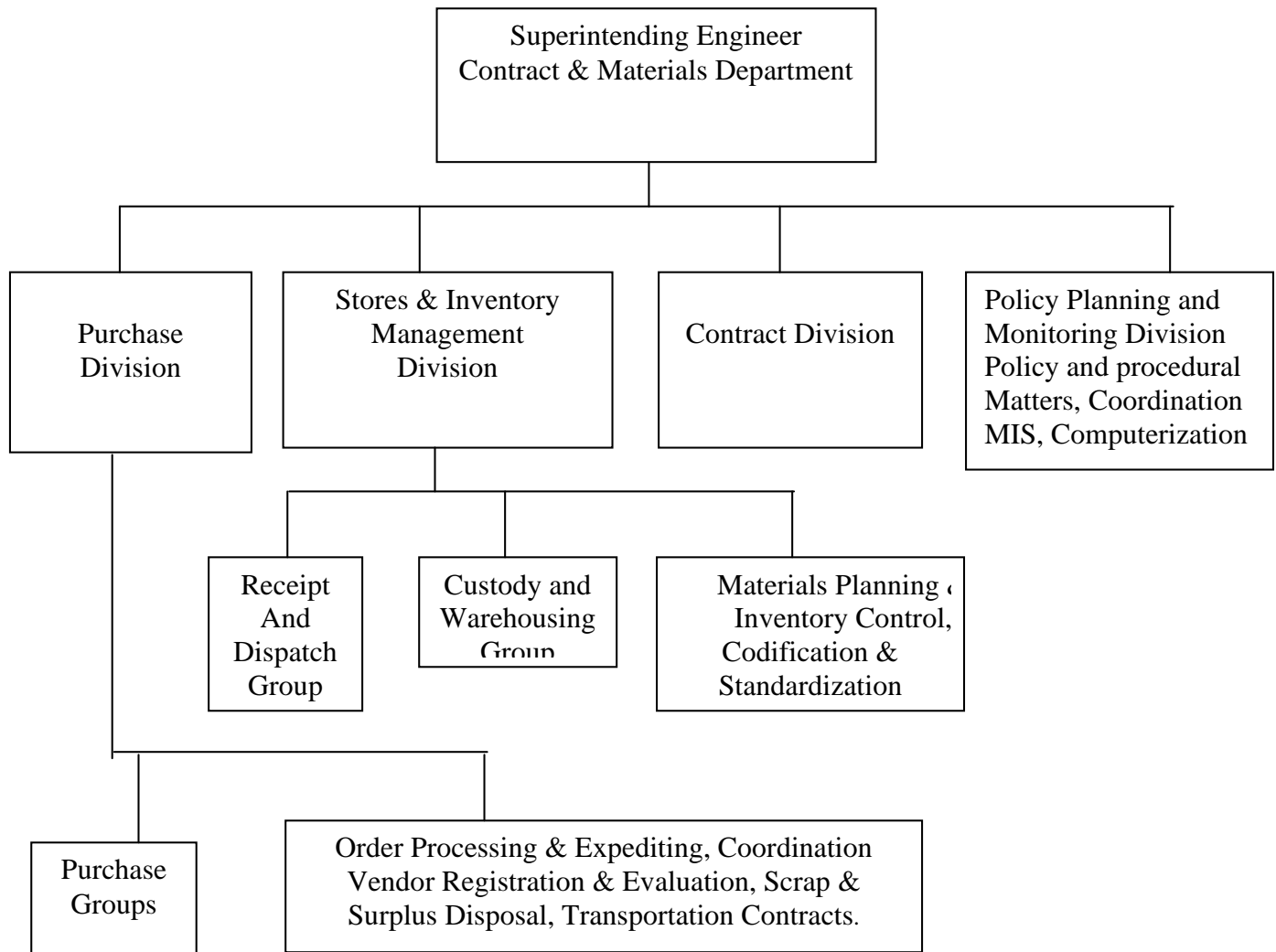
3.1.4 Pricing

Pricing function will be under the Control of Stores Division to make the Stores a self contained entity and this is necessary:

- (i) To indicate value of stores in stock
- (ii) To provide basis for material costing
- (iii) To provide the means of operating stock control by value.

3.2. Organizational Structure of Stores Management Functions

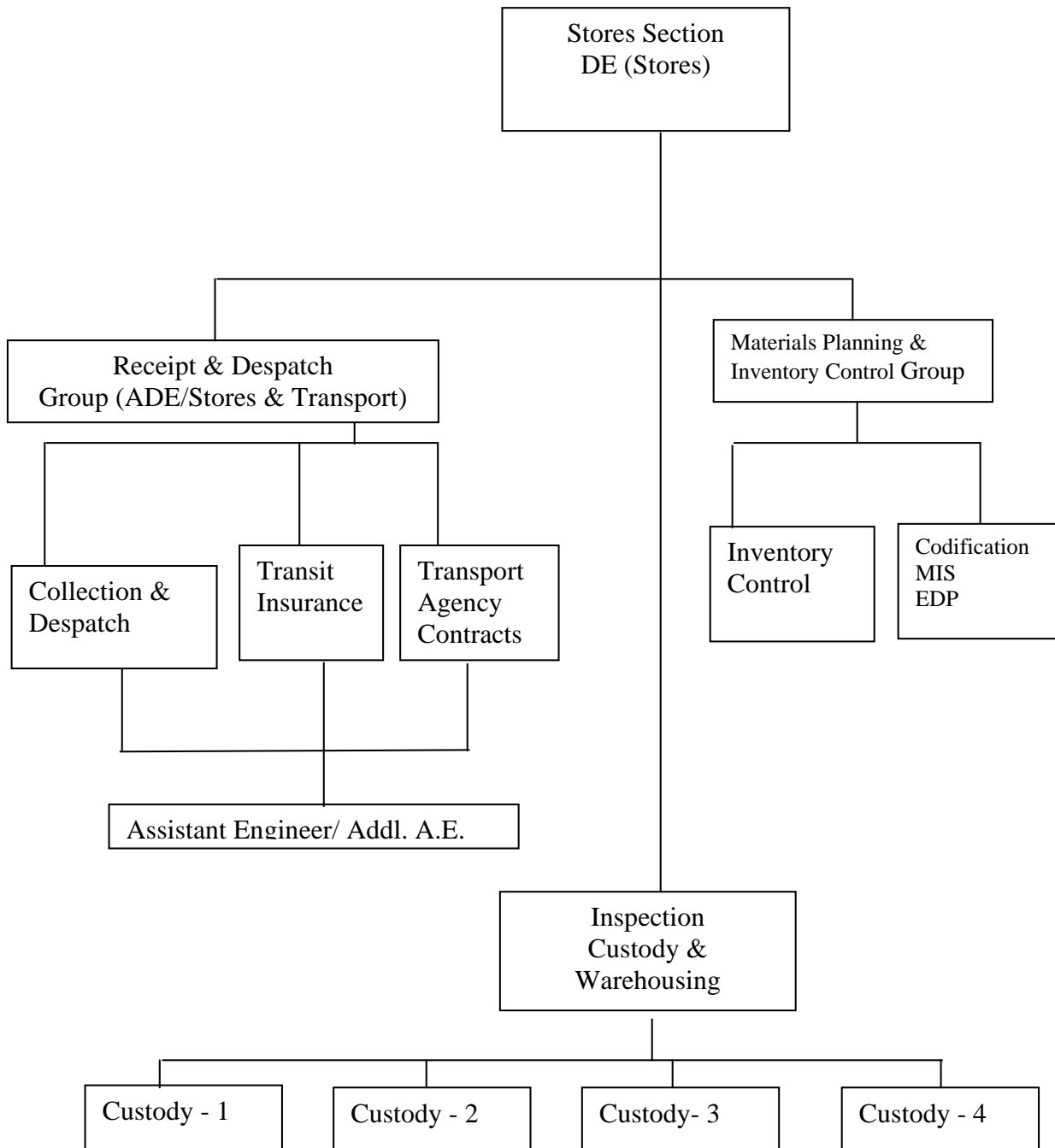
3.2.1 Organization chart of Contract & Materials Department at Power Stations



Note:

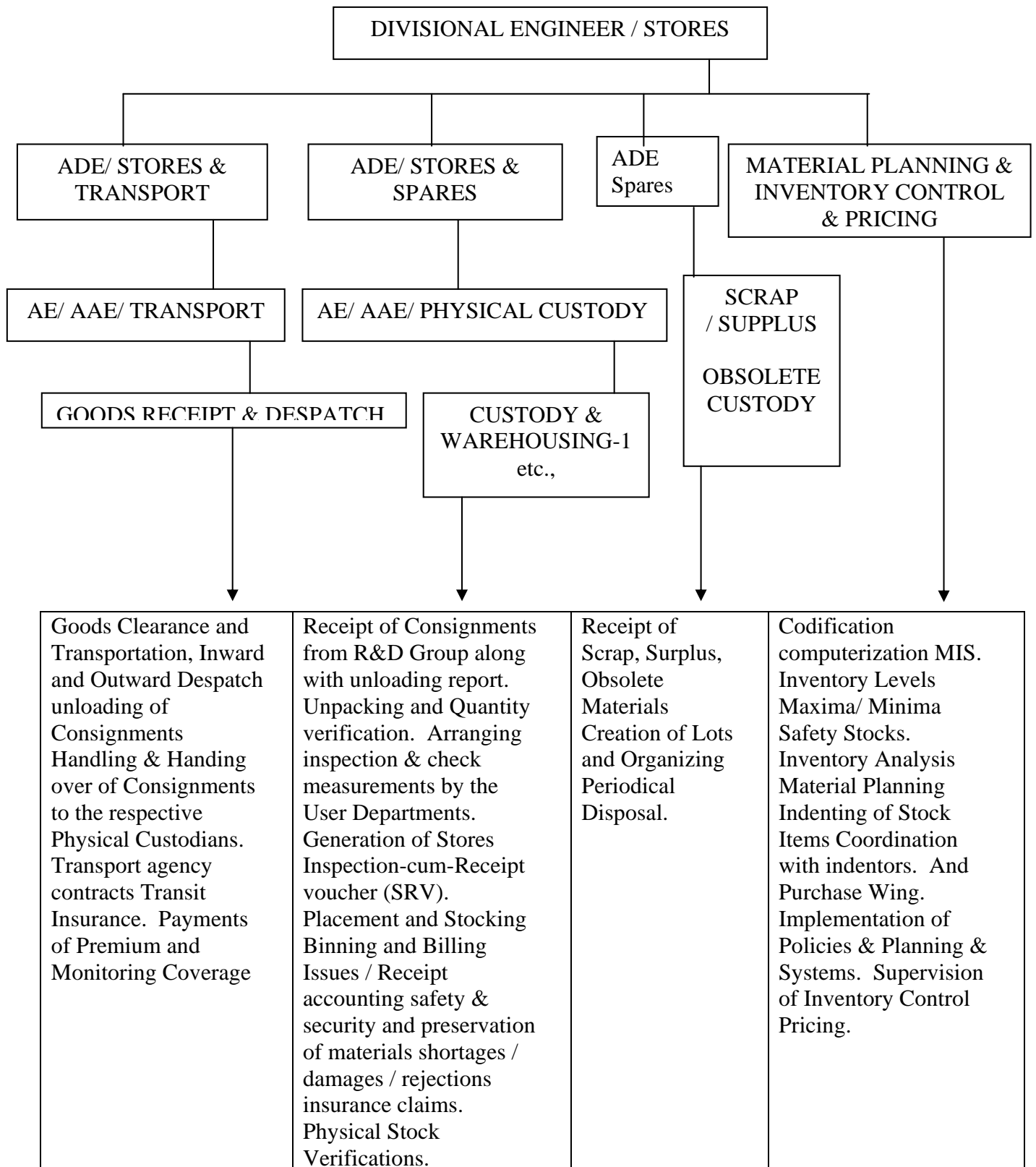
- (i) The chart is based upon the size of a plant of Vijaywada Thermal Station size and a Divisional Engineer will head each Section. In case more than one DE is posted in one section, senior most shall head the section.
- (ii) Sub section shall be headed by ADE/AE depending upon availability.
- (iii) For smaller power station the department can be headed by a DE, supported by ADE/AE

3.2.2. Organization Chart of Stores



NB: Custody can be divided like General Stores, Electrical Stores, and Mechanical Stores, C&I etc. depending upon the size of Stores. Each Group shall be headed by ADE/AE depending upon the size of Stores and also manpower available.

FUNCTIONING OF STORES ORGANISATION



CHAPTER-4

STORES RECEIVING AND DESPATCH FUNCTIONS

4. Stores Receiving & Despatch Functions

4.1 The consignee shall be responsible for receipt and documentation of all the incoming materials from suppliers against Purchase Orders/ LOI or from other units of the Corporation.

This function comprises of

- (i) Clearance & Despatch Group (C&DG)
- (ii) Transit Insurance
- (iii) Transport Agency Contracts

4.1.1 Consignee

ADE/ Stores and Transport will be the consignee for materials pertaining to O & M works and DE/Stores will be the consignee for materials pertaining to Capital Works of Projects.

4.2. Transportation

Purchase orders for large number of items are placed on out-station suppliers including on suppliers abroad. Transportation and quick and safe delivery of materials is one of the important functions of materials management and looked after by stores. Efficient and effective functioning of Clearance & Despatch Group largely depends upon selection of right mode of transportation and right carrier.

Following are some of the aspects to be considered for choosing the most economical and effective carrier:

- Various modes of transportation available
- The carriers available
- The freight structure of various modes of transportation,.
- The type of risk in transit and the extent to which carriers are willing to accept.
- Freight structure of various commodities.
- The terminal facilities that various carriers offer.
- The facilities available with the various carriers for expediting and locating goods, which are unduly delayed in transit.

Keeping in view the nature of materials, urgency of requirement, a suitable mode of transportation and also a carrier is to be identified for most economical and expeditious movement of materials from the suppliers' works to our Stores.

4.3. Clearance and Despatch Functions:

This involves taking delivery of all incoming consignments by rail, road, air or personally brought by suppliers or organization's personnel and also arrange outward dispatches viz. materials transferred to other units of the organization or returned to supplier for repair/rectification or replacement.

Broad activities and responsibilities include:

4.3.1. Receipt of Purchase Orders and Amendments:

A hard copy / copies of all the Purchase Orders/LOI and also subsequent amendments are received by Divisional Engineer (Stores) from Purchase Department of Unit and Corporate Office, who will distribute the copies of the P.Os among Receipt Group, Custody Group and Computer. All copies of P.Os so received shall be entered into a P.O. Register, which shall be maintained in sequence of P.Os serial number (specimen of Register- Appendix - 1). This register shall be very useful to search for a particular P.O. and also to keep track whether copies of all P.Os have been received.

4.3.2. Receipt of Despatch Documents

Despatch documents i.e. RR/ PWB/LR/ AWB etc shall either be received directly from the supplier or from Accounts Department (when negotiated through bank for advance payment in full or part depending upon conditions of Purchase Orders/LOI)

a) **Receipt of Despatch Documents Directly from the Suppliers:**

If 100% is to be released after receipt of materials, suppliers are advised through 'Despatch & Invoicing Instructions' forwarded alongwith Purchase Orders to send original documents (Invoice in duplicate, packing slip/challan, consignee copy of RR/LR, Pre-despatch Inspection Report, if any, Test Certificate/ Guarantee Certificate/ Warranty Certificate, Interchangeability Certificate as per the provision of the order) to the consignee viz. Assistant Divisional Engineer (Stores & Transport)/Divisional Engineer (Stores). The requisite original documents shall subsequently be furnished to Accounts Department alongwith copies of Stores Receiving Voucher so as to facilitate payment to the supplier. Sometime suppliers may erroneously send the documents to Accounts or Purchase Department who shall immediately send these documents to Stores for prompt collection from the carriers.

b) **Receipt of Despatch Documents from Accounts when negotiated through Bank**

(i) As per 'Despatch & Invoicing Instructions' suppliers are required to send one advance set of documents to Divisional Engineer (Stores)/ Senior Accounts Officer, while original set being handed over to the bank. All advance intimations received by this group shall be kept in a folder, supplier-wise alphabetically- marked 'Advance Intimations'. As and when original documents are received from Accounts, relevant 'advance set' shall be removed from the folder and attached with other documents received alongwith RR/PWB/LR etc. Thus at a given time, only those intimations shall be available in the folder for which documents after retirement from the banks have not been received. This information shall be very useful in monitoring receipt of critically required materials, taking delivery from the carrier by furnishing Indemnity Bond and expediting retirement of documents from the bank.

ii) Despatch documents when negotiated through bank shall be received by Accounts Department after payment of requisite amount to the banker, who shall ensure that Consignee copy of RR/LR alongwith relevant documents needed for preparing the Stores Receiving Voucher are immediately sent to Stores.

4.3.3. **Recording of RR/PWB/LR/AWB etc.**

Details of RR/PWB/LR/AWB etc. shall be entered in RR/LR Register (Appendix- 2) which shall be maintained running Control Serial number, for Financial Year. Control No. of RR/LR register shall be marked on the enclosed documents. If on-line Stores Accounting System is operative, the details of RR /LR shall be registered in on-line system (details such as date of registration of documents RR/ PWB/ LR No. & Date, name of supplier, P.O. reference, brief description of materials despatched, No. of Packages, despatching and destination station name of carrier, freight details- paid or to pay, Material Inward Register Serial No. & date, supplier's invoice No. & date and 100% invoice value (this information shall be required to premium to underwriters if consignments are insured against open marine policy) and remarks, if any).

4.3.4. **Collection of Consignments from the carriers- Road Transporters and Railways Parcel/Goods Yard**

The representative of Clearance & Despatch Group (C&DG) shall maintain very close contact with the road transporters and railways so that prompt intimation is received by them regarding receipt of consignment by the carrier. Information regarding consignments which are received by the carriers but RR/ LR are not available shall be readily available with them so that action is taken for prompt availability documents and collection from the carrier to minimize payment of demurrage and wharfage charges.

(a) **Collection of Consignments from Road Carriers:**

- Delivery of small load consignment normally is required to be taken from transporter's godown, unless the consignments are booked on 'Door Delivery' basis
- The representative of C&D Group shall visit the carrier's godown with LRs. pending for collection of consignments.
- While taking delivery it has to be ensured that the correct packages being handed over by the transporter and as detailed in LR. Marking on each package to be checked very carefully.
- If any apparent damages are noticed to the consignment or packages are delivered short, open delivery shall be insisted upon and contents shall be checked with reference to suppliers' invoices and open delivery certificate is to be obtained from the transporter indicating the condition of consignment, short delivery of packages, if any, weight of package (s) offered for delivery and weight as per LR, individual items details with value of items delivered damaged

and/ or found short. This document is very vital for preferring claims on the carrier, underwriters/ suppliers as the case may be.

- The carrier upon payment of freight, demurrage, other charges, if any, shall normally deliver consignment. Demurrage charges are known as avoidable expenses and as such consignments shall be collected from the carrier promptly. Cordial business relation shall be developed with road carrier so that they do not demand demurrage and if at all demanded, only token amount is paid.
- (b) Collection of Consignment from Railways Parcel Office/ Goods Yard**
- If despatches through Railways are substantial, the representative of C&D Group shall visit Railways parcel office/ goods yard regularly to take delivery of consignments which have been received and RR/PWB are available.
 - If the consignments are not received he shall obtain 'Not arrived' remark on such RR/PWB from the Goods Clerk.
 - He shall also make a note of consignments, which have been received but RR/PWB are not available. If the consignment received are booked as 'SELF', and advance intimation from the supplier is available, matter shall be pursued with Finance and Purchase to ensure faster retirement of documents so as to minimize payment of wharfage charges. However, if the consignments received are booked in the name of Corporation, delivery shall be obtained by furnishing Indemnity Bond. A proper record of Indemnity Bonds shall be maintained and as soon as RR/PWBs are received those shall be surrendered to railways and Indemnity Bond got discharged.
 - In case any wagon is placed in the Goods Yard, and there are indications that it is meant for the Corporation, immediate arrangements shall be made for unloading so as to avoid demurrage charges.
 - In case any consignment is received in outwardly damaged condition or some packages are received short, book delivery shall be taken and consignment left with the railways for Open Delivery if such delivery cannot be given immediately by railways on request. Suitable remarks to this effect must be incorporated in the Delivery Book. By taking the Book Delivery and making payment of railways dues there shall not be any further wharfage charges. Railway Goods Clerk may not be authorized to give open delivery and a date is fixed when competent person of railways shall be available for open delivery. While taking the open delivery it shall be ensured that weighment of materials being offered for delivery is carried out to substantiate shortages, if any. Open delivery certificate shall be obtained after opening the packages and physical verification of items/ quantities received with reference to supplier's invoice, indicating details of items received short/ damaged and their value.

4.3.5. Receipt of Consignment brought on Door Delivery basis

- Normally full truck- load consignments are booked on door delivery basis. As soon trucks are received, arrangement shall be made for unloading
- Weighment of truckload consignment, both gross and tare weight invariably shall be carried at weighbridge at site to work out net weight of packages. This information shall be needed to find out any shortages in the materials so delivered and also needed to process freight payments to the carriers.
- The representative of C&D Group shall supervise unloading.
- Wherever feasible, double handling of consignment shall be avoided, particularly in respect bulk materials. Direct unloading of such goods shall be done at the place of storage at Store in consultation with the custodian of the materials and in exceptional cases at the place of their usage if user departments urgently require goods. In case goods are unloaded at user's end, prompt accounting documentation related to Receiving and Issuance shall be completed.
- Normally the consignment booked on Door Delivery basis accompanies the Consignee copy of LR alongwith driver's copy. Before acknowledging the receipt and handing over LR to transporter/truck-driver, it has to be ensured that details are entered in RR/LR Register
- There may be a situation when a truckload is placed in the Stores but the consignee copy of LR is not available either with the transporter/ truck driver or with us. Under this situation material may be unloaded, receipt given to the transporter on driver's copy of LR. If the consignment is booked in the name of the Corporation, matter may be taken up with the supplier under intimation to Purchase and Accounts to furnish consignee copy of LR, which shall be handed over to the carrier later. Details of LR shall be entered in the RR/LR Control Register and further action is initiated to take the materials on charge.
- However, consignment brought on door delivery basis and booked as 'SELF' but consignee copy of LR is not available with us, such consignment shall be unloaded at a place where the contents do not mix up with other materials. Further action for accounting of consignment shall be deferred till such time, consignee copy of LR is received after retirement of documents from the bank. Matter shall, however, be immediately taken with Finance and Purchase for early retirement of documents.

4.3.6. Receive the materials despatched as Registered Post Parcel/ VPP or through courier and maintain necessary records. The details of receipt of such consignment may be entered in RR/LR Register.

4.3.7. Receive the materials personally brought by supplier or any other person or agency and after proper checking acknowledge the receipt.

- 4.3.8. Collect the materials from the local supplier's premises, if required as per the provision of purchase order.
- 4.3.9. An Unloading Report shall be prepared for all the materials, which are brought in (Appendix – 3). Information available in the Unloading Report (UR) shall include name of supplier, P.O. No. & date, RR/LR No. & date, date RR/LR received in Stores, Name of the carrier and its Code, consignment insured by, freight details, demurrage/warfare if any, No. of packages despatched and received, conditions of packages, if open delivery obtained- details, Wagon/ Truck No., weight of consignment as per RR/LR, broad description of materials, Invoice/challan No. & date, unloading location etc. Unloading Report shall be prepared in duplicate and handed over to the respective physical custodians along with consignment who shall return one copy to C&D Group acknowledging the receipt. This copy shall be filed in sequence of control number for records (Unloading Report shall be pre-numbered if prepared manually- printing shall be arranged in the form of book each containing 50 sets. However, if Unloading Report is generated through on-line system, control number shall be assigned by computer.

Unloading Report:

- i) This shall be the first report generated by the Stores regarding arrival of materials and used for handing over consignment by C&D Group to respective physical custodians furnishing along with all details related to the delivery of consignment.
- ii) In the computerized system, unloading reports are to be linked with Stores Receiving-Voucher and thus periodical report can be generated for those consignments which for some reasons or the other have not been taken on charge and thus plays an important role in monitoring activities of Receipt Section.
- iii) Separate series of unloading report shall be raised for materials which are to be taken on charge of Stores by preparing Stores Receiving Voucher, and those consignments which are to be directly handed over to use departments (items which are received back after repair/ rectification)
- v) Requirement of preparing Unloading Report can be dispensed with at small business units where receipts are limited. The consignment, upon receipt can straightway be entered into Materials Inward Register (MIR)
- vi) In bigger stores 'Clearance & Despatch' Group shall hand over the incoming consignments to respective physical custodians along with the Unloading Report and obtain acknowledgement on duplicate copy of the report.

4.3.10. **Materials Inward Register (MIR)**

Enter details of all the incoming consignment in Material Inward Register- MIR (MIR No., name of the supplier, P.O. reference, brief description of materials, RR/PWB/LR No. & date, No. of packages dispatched and received, Name of carrier, Freight details, prepaid or to pay and amount, Unloading Report No. RR/LR Control No., SRV No. & date etc). This is a very important document of Receipt Section and is used for the purpose of controlling the receiving documentation of consignments, which have been received on day to day basis (Specimen of MIR – Appendix 4).

4.3.11 Follow up with Purchase and Finance to furnishing despatch documents for the consignment, which are received at carrier's godown but delivery cannot be taken even by furnishing Indemnity Bond, having been booked as 'SELF'

4.3.12. **Claims for Non-Delivery**

It is the responsibility of C & D Group that a timely intimation (through prescribed format for preliminary claim intimation – Appendix 5) for non- delivery of consignment, unduly delayed so that claim for non-delivery are lodged with carrier within the limitation period (6 Months from the date of despatch). Such claim is essential to protect the right of recovery of the Insurance Company, whether the transit cover is through Corporation or the supplier. If the supplier arranges the insurance a copy of preliminary claim on the carrier is forwarded to them to lodge a monetary claim on the carrier/their underwriters. If the Corporation arranges the transits insurance, after waiting for a reasonable time formal/monetary claim shall be lodged on the carrier and underwriter by Receipt and Despatch Group. A close coordination also needs to be maintained with the carrier so as to expedite delivery of consignments, which are over due.

4.3.13. **Accounting of Demurrage/Wharfage Charges**

- i) Before making payment of demurrage and wharfage charges, every effort shall be made at appropriate level with the carrier to secure maximum amount of waiver.
- ii) A proper record shall be made for demurrage and wharfage charges paid to the carrier including reasons for delay in unloading the wagon (s) or taking delivery from railways/road carriers (Specimen of Demurrage & Wharfage Register- Appendix 6)
- iii) In case the demurrage/ wharfage charges are payable due to certain faults/lapses on the part of supplier, recoveries shall be made from the supply invoice (s) or any other amount payable to them. Suitable remarks to this effect shall be incorporated in the Unloading Report and subsequently in Stores Receiving Voucher

- iv) If the expenditure is to be borne by the Corporation, write off approval of competent authority as per the Delegation of Powers must be obtained which shall in original forwarded to Accounts Department and copy retained for Stores records.

4.3.14. Payment of freight/ Misc. or other charges to the carriers:

- j) If payment of freight or other expenses (siding charges, demurrage and wharfage etc) is substantial, it is advisable to avail Credit Note facilities offered by Railways.
- ii) **Petty Fright and Misc. payment – Sanction of Imprest Advance:**
- In order to ensure prompt collection of consignments from railways/ road transporters, it is imperative that the representative of R&D Group detailed for this activity carries fund with him so as to make payments to the carrier.
 - For the purpose of payment of freight, demurrage/wharfage, loading charges and other Misc. expenses, an imprest advance of Rs. 10,000 to Rs. 50,000 depending upon the flow of materials at each Business Unit shall be sanctioned in the name of Divisional Engineer (Stores)/ Head of Stores, by the Chief Engineer/ Head of Unit on the beginning of the year with suitable annual ceiling of such expenses and budgetary provisions. As soon as part of amount is spent, a statement of recoupment of imprest advance shall be prepared and sent to Finance. It shall be expected that by the time balance available cash is spent reimbursement of earlier expenditure shall be received from Accounts Department. Before close of financial year the imprest advance is surrendered with statement of expenditure incurred and balance cash deposited with Accounts and the fresh advance after approval of competent authority shall be operative on the beginning of next financial year. A specimen Imprest Register is given vide - Appendix 7 that shall be subject to audit review.
- ii) If the payment to the carrier is substantial, say Rs.50,000/- and above which cannot be made from the Imprest Accounts, separate cheque may be arranged to facilitate such payments. A Freight Payment Voucher (Appendix 8) shall be prepared by the R&D Group and after approval of Divisional Engineer (Stores) shall be forwarded to Accounts to arrange for payment.

4.3.15 Daily Receipt Report

A Daily Receipt Report (Specimen at Appendix 9) shall be generated by the R&D Group based upon the details of consignments/materials entered for the day in the Materials Inward Register (MIR). This report shall include details such as name of supplier, P.O. No. & Date, RR/LR No. and date, brief description of consignment, MIR No. and remarks etc (if any consignment/materials are being monitored due to urgency of requirement, this shall be highlighted in the remark column).

4.4. Out-station Dispatches of materials

Out-stations despatches may fall in following broad categories.

- i) Issue of materials to other units of the Corporation (through Stores Transfer Note) using public carrier as per advise of Custody Group.
- ii) Damaged/rejected materials to be sent to suppliers for rectification/ replacement as per advise from Custody and Warehousing Group.
- iii) Equipment/ Instruments/ Assemblies/ Sub-assemblies to be sent to Original Equipment Manufacturers or other parties for repair/ rectification/ replacement as per the direction of User Departments.
- iv) Empty gas cylinders sent to supplier for refilling or materials despatch for any other reasons duly recorded.

4.4.1. Responsibilities of Receipt & Despatch (R&D) Group for Despatches of Materials

- i) Receive the materials for despatches to outstation after getting them packed in a secured manner to avoid damages in transit.
- ii) Prepare a Stores Delivery slip (Appendix- 10) which shall indicate particular of despatch such as Date of despatch, Carrier, LR No. & date, Reason for despatch, Description and quantity of materials, No. of packages. Apart from other endorsement, 2 copies of Store Delivery Slip shall be sent to consignee who is required to return one copy confirming receipt of materials in good condition.
- iii) Arrange despatch of materials through public carrier and secure both Consignor and Consignee copies of LR (If consignment is despatched on full truck load basis, consignee's copy is attached with driver's copies of LR) which shall be entered into RR/LR Register for Outstation Despatches (Appendix 11)
- iv) Outstation despatches can be made both on freight paid/ to be bill or to pay basis as per the advice by the department requesting for despatches.
- v) Packaging of materials for outstation despatches shall be witnessed by security officials. Similarly security officials may be requested to witness loading, if verification of quantity later at the security gate cannot be done.
- vi) External Gate Passes for such despatches shall be issued by Stores, which shall stipulate reasons for despatches, and also as to whether materials are being sent on returnable basis or on non-returnable basis. A proper record of materials sent on returnable basis shall be maintained and shall be reviewed from time to time to ensure that such materials are returned to the unit.

4.4.2. Treatment of Materials received from User Department and sent for repair.

Such consignment received after repair shall be entered in Materials Inward Register (MIR) and shall be handed over to the user department after obtaining acknowledgement in remarks column of MIR. Two copies of unloading report shall be furnished to user department who shall return one copy confirming receipt of consignment/materials. No SRV is required for such consignments.

4.5 Issue of Urgently Required Materials from Receipt & Despatch Section

In case certain items are critically required, those can either be unloaded at user's workplace or got issued from Receipt Section after necessary inspection. Person working in Receipt Section shall fill in the 'quantity issued' column of Stores Issue Voucher (SIV) and sign in relevant column; 'Issued by' but shall not allot control number to such SIVs.

Such SIVs shall be sent to Custody along with user's and balance materials if any which shall be allotted a control number by custodian, posted in stock records and distributed along with other documents. Based on the acknowledgement of the user department on unloading report and SIV for the quantity directly taken by them, SRV can be generated and accounted by the custodian.

4.5.1 Regularization of Emergency materials collected from supplier by User Departments :-

Normally the materials from suppliers shall be received by Stores Department. However, due to urgency of requirement, material may also be collected by user departments who shall hand over the material to C&D Group for necessary completion of receiving and proper accounting. In exceptional cases of utmost urgency, materials so collected from supplier may directly be taken to workplace and consumed/utilized. It is to be ensured that the material (s) so collected from the supplier is/ are checked by the security personnel and enter in the Incoming Material Register (serial number marked on the back of Invoice/ Challan and signed by the duty officer. However to regularize the receipt, supplier's Invoice/ Challan/ Packing Slip along with Stores Requisition cum Issue Voucher for the related items shall be handed over to R&D Group. The urgency of requirement shall be confirmed by the Superintending Engineer/ HOD of concerned department.

4.6 Insurance and Claim Settlement

4.6.1 Procurement of appropriate Marine Risk Policy:

- (a) An Open Policy or similar suitable 'Inland Transit Insurance Policy' need to be obtained from the underwriters with suitable extension of 4 to 8 weeks Storage cover while goods are lying in the railways'/ Road Transporters' premises (the period of extension may be determined keeping in view the time taken for retirement of documents when negotiated through bank as per the provision of Purchase Orders). Seven days cover is provided under Inland Transit Policy. The tariff further permits extension of storage cover for a maximum period of 8 weeks

(or as amended from time to time) whilst the goods are lying in Railways' or Road Carriers' premises. The liability as common carrier terminates after 7 days from the date of arrival of consignment at destination and thereafter starts as Bailee.

- (b) Similarly a suitable policy for imports including CIF value and Custom Duty shall be procured. It shall be preferred to obtain such policy on 'Warehouse to Warehouse' basis.
- (c) A policy may also be procured for Outward Despatches (to cover transit risk of equipment/instrument/Assy./ Sub-assy. sent for repair/ rectification to Original Equipment Manufacturer etc or materials transferred to other units of the Corporation. Endorsement to provide insurance cover even if the transportation is done through Corporation's vehicle shall be obtained. Normally the underwriters do not agree for such endorsement, as their right of recovery is not protected. Underwriters are to be convinced that when goods move in Corporation's vehicle risk of damages and shortages is substantially reduced.
- (d) Transit insurance policies may be procured at Corporate Office for the units/ power stations or by the individual power stations depending upon management decision.
- (e) While procuring the policy care shall be taken to fix suitable limit for 'Self Survey' where the claims are processed by the underwriters based upon damage report and estimate of repair furnished by our Inspecting Engineers. An independent surveyor to assess the losses shall not be required to be deputed by the Insurers. This shall facilitate prompt settlement of claim and also liquidating the discrepancies.
- (f) A suitable 'No Claim' limits shall also be finalized i.e. upto certain limit the losses shall be borne by the Corporation. Claim shall be lodged only if their value is more than this limit (not to be construed as Excess Clause). Such limits may be decided depending upon the cost of processing a claim on carrier and/ or on underwriters (cost of paper work, postage, and man-hours for preparing claim, follow up and accounting of financial compensation). Such limits may be ranging Rs. 250 to Rs. 500 per claim. A standing approval for write off of loss upto the financial limit so fixed shall be obtained. Suitable remarks in this connection shall be incorporated in the SRVs. By fixing such limit there shall be corresponding saving to the underwriters who may in turn increase 'Self Survey' limits or offer some discount on premium.

4.6.2 Payment of Premium to Underwriters:

This group shall further be responsible for arranging timely payment of premium to underwriters in such a way that sufficient funds are available with them to cover the risk against marine policy for despatch from various suppliers. The basic principle of underwriting is 'no premium no risk' Apart from normal deposit with underwriters, additional payment shall be made if certain substantial high value materials are expected to be despatched. 100% value of supplier's invoice shall be basis, regulating payment of premium. If any consignment is under-insured, it may effect settlement of claim for full value, in the event of any damages.

4.6.3 Preservation of Right of Recovery of Underwriters:

- (a) In order to ensure prompt settlement of claims on underwriters for full compensation as claimed (to avoid claims becoming sub-standard and time-barred), as a consignee it shall be our duty to protect their right of recovery. Right of recover implies to lodge prompt claims for non-delivery/ short delivery/ damages on carriers, keeping in view the following statutory limits for preferring the claims and for filing suit.

Name of the Carrier	Time limit for Lodging Claim	Time lime for Filing Suit
Steamer Agents (Sea)	3 days from the date of month's Landing from vessel	One year with one notice (extension if required before expiry)
Rail Carriers	6 months from the date of booking (as per Section 78B of Indian Rly. Act and as per Article 10 of the Limitation Act.	Three years from the date of delivery or date when the consignment ought to have been delivered
Road Carrier (Motor Lorry)	6 months from the time loss or injury came to knowledge (Section 10 of Carrier Act	-DO-
Air Freight	Immediately	Two years from the date of arrival at destination or date on which aircraft ought to have arrived (as per Indian Carriage by Air Act
Port Authorities	Within 7 Days	Time limit vary from port to port
Postal	Immediately	3 years from the date of Postal receipts

Note: As per Section 80 of Civil Procedure Code whenever a suit is required to be filed against the Govt. two months notice is required to be given before filing a suit and this period is added to the period of filing suit. Such a notice is to be given to Railways and Postal Authorities.

- (b) If timely claims are lodged on the carrier, underwriters shall be in a position to effect recovery from the carriers/agencies responsible for losses/damages after indemnification of the loss. Such recoveries not only enable insurer to bring down claim ratio but also to lower the premium. The carriers are responsible for safe delivery of consignments assigned to them and they are liable for losses caused whilst the consignment are in their custody.
- (c) When the consignments are taken delivery from the rail/ road carriers, the packages shall very carefully be examined to ensure (a) right packages are being taken delivery (b) there is no apparent signs of damages. If the consignments are found outwardly damaged, Open Delivery must be insisted upon. If for any reason open delivery is not granted, suitable remarks shall be made in railways' delivery book/ clean receipt is not to be given for damaged packages. A protest letter shall immediately be handed over to the carrier and receipt obtained on the office copy or sent to the carrier by Registered A/D.

- (d) On the basis of Damage/Shortage Certificate, a provisional claim must be lodged on the carrier within 6 months from the date of RR/LR. While lodging the claim all relevant particulars such as booking and destination stations RR/LR No. & date, details of goods received damaged/short, nature of loss and amount of claim (preferably a photo copy of RR/LR shall be enclosed with the claim)
- (e) In case of non- delivery of consignment within the normal time, a provisional claim must be lodged on the carrier. To facilitate investigation, it shall be ensured that the claims are addressed to Chief Commercial Manager of the concerned Railways, both booking and destination Railways or the concerned officials of the Road Carrier. To be on safer side, time schedule as given below shall be followed for lodging provisional claims on the carrier for non-delivery.

SL. No.		Provisional claim to be lodged after date of despatch
1	Rake Load	15 days
2.	Wagon Load	60 days
3.	Small by Passenger Train	60 days
4.	Small by Goods Train	90 days
5.	Full Truck Load	20 days
6.	Small by Road	45 days
7.	Air Consignment	15 days
8.	RPP/ VPP	30 days.

However, such non-delivery claim shall invariably and formally be withdrawn as soon as the consignments are delivered later.

(f) Claims for Pilferage and other damages:

When the consignment is offered for delivery by the carrier in outwardly damaged condition, we shall observe the following:

- (i) Apply for Open Delivery before clearance (in case of rail consignment book delivery shall be taken to avoid any further wharfage charges if open delivery is not given immediately but consignment shall be left with railways for open delivery)
- (ii) Lodge protest in writing if open delivery is refused. If protest letter is handed over personally, acknowledgement is obtained on the office copy, or else such letter shall be sent by Registered A/D. Consignment may be cleared, wherever possible, after an insurance survey.
- (iii) File a notice of claim on the carriers within prescribed limits

(g) Consignments Insured by the suppliers

Similar course of action as above must be followed if the consignments are booked at the risk of supplier (Insurance to be arranged by the suppliers) so that right of recovery of insurer of the supplier is protected. Such claims need not be followed any further. After having lodged a provisional claim on the carrier, all relevant documents shall be sent to the suppliers so as to enable them to lodge formal claim on the carrier/underwriters and also to arrange, in the meanwhile, replacement supplies to the Corporation.

4.7. Preferring claims with Carrier/Underwriters:**4.7.1. Claim on Carriers:**

Claims for loss of consignments shall be preferred by Receipt and Despatch Group whereas Claims for shortages by damages shall be preferred on carriers / Under writers by respective physical custodians promptly.

- (a) In order to monitor claims status from time to time, a Claim Register (Appendix- 18) shall be maintained. While entering the details in the Claim Register, a claim No. shall be allotted which shall be in running sequence number for each financial year. A separate file for each claim shall be opened and all documents for future correspondence relating to the particular claim shall be filed in the claim file. Copies of claim shall be furnished to Collection & Despatch Group/ Purchase Section giving reference of P.O. and SRV.
- (b) Claims for shortages/damages/non-delivery shall be preferred with the carriers using standard claim format viz. claim for shortages and damages on road carrier (Appendix 19), for non-delivery on road carrier (Appendix 20) and for shortages, damages and non-delivery on Railways (Appendix 21). The following documents shall be enclosed with the claims
 - i) Copy of shortages/damages certificate from the carrier if consignment found apparently in damaged condition and open delivery obtained.
 - ii) Claim bill-indicating details of shortages/damages and their value as per supplier's invoice
 - iii) Copy of RR/PWB/LR.
 - iv) Copy of supplier's invoice.
- (c) In case of non-delivery of consignment, a copy of non-delivery certificate, and claim bill for the value of consignment, copy of RR/PWB/LR, copy of Supplier Invoice etc.

- d) Claim shall be sent to the carrier under Registered A/D and A/D card after receipt shall be preserved as a proof for having lodged provisional claim and confirmation of receipt from the carrier.

4.7.2. Claims on underwriters

If the consignments are insured by the Corporation, apart from the claim on carrier, claims shall be preferred on the Underwriter also. Claim No. shall remain the same and so shall be the claim file. Copies of claim on underwriters shall be furnished to Receipt & Despatch Group/ DE (Purchase) with reference of P.O. and SRV. Following procedure shall be followed for claim on the underwriters.

- a) Claims shall be lodged on the prescribed format of underwriter (specimen of format Appendix 22) along with following documents.
 - i) Claim bill-indicating details of items found damaged/short with value as per supplier's invoice.
 - ii) Damaged/shortages and/or open delivery certificate from the carrier.
 - iii) Copy of claim (sent through Registered cover A/D) for shortage/damages or non- delivery claim preferred on the carrier.
 - iv) Copy of letter sent to supplier and reply if any
 - v) Acknowledge Card/ reply from the carrier, if received.
 - vi) Copy of RR/PWB/LR (original to be retained so as to take delivery if consignment is arrived before settlement of claim)
 - vii) Copy of invoice from the supplier to substantiate value of claim bill
 - viii) If the value of claim is within 'Self Survey' limit, report of Inspection Engineer alongwith estimate of repair (if repair to be carried out departmentally or else to be obtained from the supplier)
- b) While registering claim, the underwriters shall provide their claim reference, which shall be recorded in Claim Register and used in all future correspondences with them.
- c) For non-delivery claim, especially for those consignments that are despatched as full wagon/truck load, underwriters shall be requested to promptly depute their Chaser/ Expeditors for tracing the consignments and expediting delivery at destination. Delivery of consignment is very important rather than getting financial compensation for the loss.
- d) If the value of loss is more than 'Self Survey' limits, underwriters shall depute one of their accredited Surveyors for assessment of the loss. In view of this requirement, damaged consignment/materials shall be kept at a protected place and should not be disposed of. If there is any delay in deputing the surveyor, matter shall be pursued with the underwriters.

- e) Surveyors normally submit their report to underwriters only. However, if advised by the underwriters they shall furnish a copy of survey report to us also.
- f) Upon request from the underwriters (normally after settlement of claim), we shall provide them Letter of Subrogation and Power of Attorney, which shall be signed by the competent person on behalf of the Corporation. This shall enable underwriters to proceed against the carrier for recovery of loss and the amount paid to the insured.
- g) Claims shall be followed up regularly with the underwriters/carriers (if consignments not insured) to ensure faster settlement. Any additional information if required by the underwriters shall be furnished to them promptly. If any delay is expected, ad-hoc payment may be requested for high value losses.
- h) Damaged materials shall fall under two categories. (a) Total loss where the claim shall be for the invoiced value of the items, (b) repairable. If the items after replacement of damaged components/part can be restored to their original quality, attempts shall be made to get them repaired/rectified either at our workshop or at our Stores by the representative of suppliers or by sending the damaged items to manufacturer/supplier. In this case the claim on underwriters shall be limited to the expenses incurred in arranging repair/rectification (for detailed procedure, please refer Section 4.9.3. (ii).
- i) While finalizing the claim, underwriters shall furnish cheque for the amount of settlement alongwith Discharge Voucher. If the claim is settled to the entire satisfaction of the Corporation, the concerned executive of the Stores shall sign Discharge Voucher. In case any deductions are made which are considered unjustified, settlement amount shall be accepted under protest and matter pursued with underwriters for settlement of balance amount. The remarks 'Accepted Under Protest' shall be recorded on Discharge Voucher.
- j) In case underwriter's right of recover is not protected or there are some other deficiencies, they may repudiate the claim. In such event, possibilities may be explored for settlement of claim as 'Sub-standard'
- k) The cheques towards settlement amount shall be forwarded to Accounts alongwith other relevant details such as claim No. & date, amount claimed and amount settled, and reasons for difference, if any, name of supplier, P.O. No. & date, SRV No. & date. A copy of forwarding letter shall be endorsed to Inspection & Inward Group, DE (Purchase). Accounts department, apart from completing financial accounting, shall ensure to release any payment of supplier, if withheld due to discrepancies.
- l) Salvage, which belongs to underwriter, after receipt of claim amount, shall be handed to them unless it is mutual agreed to retain the salvage and recovery of value as fixed by the Surveyor from the claim amount.

4.7.3. Direct Charge Stores Inspection-CumReceiving Voucher (DCSRV)

DCSRVs shall be the combination of following two documents

- (i) Stores Inspection-cum-Receiving Voucher (SRV)
- (ii) Stores Requisition-cum-Issue Voucher (SIV)

Format of DCSRV is designed accordingly (Appendix 15)

4.7.4. Purpose of using DCSRV

- i) We shall be buying a number of items for township, hospital (medicines, hospital supplies but excluding hospital equipment) Schools, canteens, sports goods, some petty items for administration department which cannot be rationally codified for want of detailed specifications and are not kept in Stores for future use. Such items are bought, brought to Stores for completing receiving documents and got issued by user department
- ii) Spares for some small equipment/ instrument are also received once a while, being non-repetitive. Stock of such items shall always be nil in Stores, as these items shall be issued as soon as received. In view of this it shall be imperative to keep these items outside the preview of detailed inventory control and generation of computerized output reports. It shall also be essential that these items shall properly be accounted for to regularize payments made/to be made to the suppliers.
- iii) All such items shall be accounted for through DCSRV, which contains information of Stores Issue Voucher (SIV), and cost can directly be booked to concerned user departments and accounts code. This shall help to keep the code catalogue within manageable range and cost saving of detailed accounting system.
- iv) When the purchase requisitions are raised for such items, in the column meant for codification/Folio 'DC' (Direct Charge) shall be mentioned. User department shall collect these items after inspection from Receipt Section itself without going for issue to Custody Group.
- v) A separate DCSRV Register (same as Appendix 14A) shall be maintained to assign DCSRV control number.

Since DCSRV is a Receiving-cum-Issue document it shall not be sent to Custody Group since materials shall be handed over to requisitioning department by Receipt Section and acknowledgement obtained from the receiver in appropriate column.

CHAPTER-5

RECEIPT AND ISSUE OF MATERIALS BY CUSTODY

5. Receipts and Issues of Materials by Custody Group

5.1. This function involves:

- i) Receipt of materials from Receiving and Despatch Group
- ii) Receipt of surplus materials and scrap arising from user departments
- iii) Issue of materials

5.1.1. The major functions are:

- (a) Receive the consignments/materials from R&D Group along with Unloading Report in duplicate.
- (b) Ensure that all the relevant documents for preparing the Stores Receiving Voucher are available.
- (c) Inform indenting department regarding arrival of consignment and also visit Stores for quality check.
- (d) Undertake bulk breaking of packages and checking the content with reference to suppliers invoices/packing slips
- (e) Arrange inspection of materials
- (f) Prepare Stores-Inspection-cum-Receiving Vouchers (SRVs)
- (g) To prepare Shortages, Damages and Rejection Report and initiate action for claims on carriers/insurance/suppliers. Notify details of rejections to supplier.

5.2. Broad Activities and responsibilities include:

5.2.1 Receipt of Materials from R&D Group

Concerned Official of Custody and Warehousing Group shall receive the consignments/materials from R&D Group along with Unloading Report in duplicate. After checking the consignment with reference to Unloading Report and packages/markings thereon and satisfying himself that materials are in order, return one copy of Unloading Report duly acknowledged.

5.2.2 To ensure that all the relevant documents for raising Stores Receiving Cum Inspection Report, i.e. purchase orders, supplier's invoices/packing slip and other relevant documents (such as guarantee/warranty certificate, pre-dispatch inspection report, test certificate, interchangeability certificate etc) are available

5.2.3. Intimation to User/Indenting Department for Inspection of Consignment/ Materials

After sorting out day's receipt indenter/user-wise, a request letter is sent to them to visit the Receipt Section and carry out inspection (Appendix 12)

5.2.4. Arrange opening of packages and checking up of contents. Packages shall be handled/opened in such a manner that the materials contained in them are not damaged. Empty packages and scrap arising shall be removed immediately after quantitative careful search for any missing item is over.

5.2.5. If the materials are found in damaged condition, empty packages shall be preserved alongwith materials for inspection by the Surveyor of Insurance Company, if so required.

5.2.6. Checking of materials:

- a) To check the materials and quantities by counting number of pieces, measurement or weighment as the case may be with supplier's invoices or packing slips.
- b) To check the materials with purchase order to ensure that right materials have been received.
- c) Samples if any approved earlier shall be co-related and made available to inspection personnel.
- d) To check general condition of materials to detect any damage in transit.
- e) To check other terms and conditions of orders to ensure that suppliers have fulfilled those obligations such as submission of literature/catalogues, test certificates, guarantee certificates etc.

5.2.7. After checking the materials, Store Inspection cum Receiving Voucher need to be prepared for individual consignment with leaving blank quantity accepted column, which is to be filled by inspection official after completing process of inspection. After checking the materials fragile and pilferable items shall be stored in a small room with locking facilities.

5.2.8. Inspection:

All incoming materials shall be subject to careful inspection, involving dimensional aspect, materials analysis, performance test etc. Inspection may be carried out either by user departments or by independent Quality Assurance Group, as the case may be.

- a) Inspection shall be carried out with reference to specifications contained in purchase order and ensure that damaged, wrong or defective materials are properly identified.
- b) The details of discrepancies, if any and quantities accepted are recorded on the Stores Receiving Voucher and signed by inspection personnel.
- c) Reasons for rejection shall clearly be spelled out so that those are communicated to the supplier for corrective action. Vague remarks shall be avoided as these create confusion and discrepancies remain unsettled for longer period.

d) The Inspection Officer, after filling details of items/quantities accepted and also recording detailed reasons for rejections, if any, shall sign in the requisite column i.e. Inspected by'

5.2.9. Stress should be given to develop quality plans for critical and high value materials and those quality plans shall be communicated to the suppliers along with tender documents so that they are aware of system of quality check.

5.2.10. Inspection can also be carried out at supplier's works before dispatch of materials. Following are some of the reasons, which warrant Pre-despatch inspection:

- Non-availability of inspection and testing facilities at power stations
- Materials are of critical nature, especially spares (high value Assemblies, Sub-assemblies etc.), buyer may like to be involved during different stages of manufacturing
- Transportation cost is one major component of cost of materials, non-acceptance of materials after receipt may create problems for bearing the transportation cost. It is imperative that such materials are inspected at supplier's work before despatch.
- Payments, full or part are through bank in exchange of despatch documents and supplier's credibility is not established.

Even if the inspection is carried out at supplier's work, inspection at our Stores after receipt is again carried out to establish that the goods despatched are the same, which have been inspected and accepted and there are no damages during transit.

5.2.11. Receipt of Sample Supplies:

- There may be provision in some Purchase orders that the supplier shall submit sample (s) for approval and after acceptance of sample to process bulk manufacturing.
- If the sample supply is found in order a confirmation is made to the supplier to proceed for bulk supplies.
- The sample (s) so approved shall be kept in the Custody Section with proper identification mark i.e. Description of item, Code No./ Folio No., Name of Supplier, P.O. reference.
- Sample shall be used to guide the inspection of bulk supplies and as such should be made available to Inspection Engineer while inspecting the bulk supplies`.
 - Normally the suppliers adjust the samples with final supplies and as such while taking the final quantity on charge, sample (s) shall also be included in SRV with suitable remark regarding sample and also as to whether it is free or included in invoiced quantity of suppliers.

5.2.12. Availing discounts on faster payment:

There may be provision in some of the Purchase Orders for discounts if payments are made within the stipulated period. It is to be ensured that SRVs against such P.O. are raised on priority so that discount is not lost. A very close coordination shall be maintained with Accounts.

5.2.13. After inspection is over, SRV shall be allotted a control number. Identification tags indicating description of items, Code number/ folio number, Quantity and SRV No. & Date shall be attached with one piece of each items. If the items are stacked in open yard SRV No. & Date and item code No. shall be written with the paints atleast on few pieces.

5.2.14. Receiving Vouchers complete in all respect along with materials shall be taken for binning and stock- recording. The custodian shall check up quantities of all the items and thereafter start binning. After binning the materials at the proper location, indicating bin details and posting in the ledger/ cards or the computer master in the on-line system, the custodian shall sign in the relevant column of the Stores Receiving vouchers.

5.2.15. Discrepancies Report (Appendix- 13) is prepared if any discrepancy is noticed, and take up the matter with the supplier for effecting replacement of supplies against damages/rejection and make good the shortages if any. Copy of Discrepancies Report shall be sent to the supplier / user department / purchase section / accounts section. It shall be preferable that a copy of Discrepancies Report shall be enclosed with respective copy of SRV. Discrepancy Report number shall be the same at which Sl. No the details have been entered in Discrepancy Register (Appendix 16).

5.2.16. After completing all the above formalities SRVs (Appendix 14) complete in all respect shall be submitted to Head of respective Custody Section for his signature in the relevant column.

5.3. Stores Inspection-cum-Receiving Voucher

This shall be combination of Inspection Report and Receiving Voucher which details description of materials received, quantities invoiced by the supplier, quantity physically received and accepted after inspection and other relevant information as item code, unit of measurement, supplier's invoice/packing slip number and date, purchase order reference, name of supplier, name of carrier, GR/RR No. and date, Truck No./wagon No., freight details, payment of demurrage and wharfage charges if any etc. Volume-wise SRV Control Register (as per codification Scheme) shall be maintained to assign control number (Appendix 14A). SRVs shall be raised P.O.-wise. If a supplier has despatched materials against more than one purchase order in one consignment, separate SRVs against each order shall be prepared. However if required, one SRV can be raised for a number of consignments, if they are against one P.O.

5.3.1. This is used for :

- i) Taking the materials so accepted on charge of the stores by the Custody Group and also updating Priced Stores Ledger by Accounts Department.
- ii) Recordings detail of inspection, discrepancies if any and reason thereof.
- iii) Making payment to the suppliers. No payment (other than payment through bank or against Proforma invoice) shall be made to the supplier without linking with original SRV. This shall eliminate possibilities of double payments. Payments are normally made only to the extent of materials accepted after inspection and not for quantities invoiced by the supplier. Payments made through bank or against delivery shall be treated as advances to the suppliers and those advances shall be adjusted in the book of accounts only after receipt of SRV by the Stores Bill Section of Accounts Department. This shall ensure that materials for which payments have been made are received and properly accounted for. In case any of payments made to the supplier remain unadjusted for longer time, a search is made for the whereabouts of materials for completing receiving documentation. Thus there shall be in built checks in the system.

5.3.2. In view of above functions, 4 copies of SRVs are distributed as under:

- | | | |
|--------------------------------|---|--|
| (2 Copies) Accounts Department | : | For updating priced stores ledger and payment to suppliers. |
| (1 copy) Custodian of Stores | : | For record purpose and reconciliation of discrepancies if any noticed during the process of stocktaking. |
| (1 copy)) Master Folder | : | For quick reference. |

5.4. Insurance & Rejection Functions :

This function is also entrusted to Custody Group.

Broad Functions of Insurance and Rejection are:

- a) Record the details of rejected materials in the Discrepancy Register as per Discrepancy Report.
- b) Hold the rejected goods till such time discrepancies are resolved
- c) Prefer the claim on the carrier/underwriter for damages and shortages against Open Delivery Certificate and damages noticed from the intact packages
- d) Follow up settlement of discrepancies with the suppliers
- e) Prefer non-delivery claim with carrier/underwriters/suppliers as the case may be (This will be preferred by R&D Group).
- f) Arrange survey of damaged goods, if required
- g) Arrange payment of premium to underwriters for marine policy.

- h) Follow up settlement of claim with underwriter
- i) Arrange inspection of goods when replacement supplies are received.
- j) Prepare SRVs when replacement supplies are accepted.

5.5. Broad activities and Responsibilities include:

5.5.1. Review the rejected materials with Discrepancy Report and enter the details in Discrepancy Register (Specimen Appendix 16).

5.5.2. Stack the rejected materials in Rejected Stores (A small enclosure within the Custody Section with storage and locking facilities) till discrepancy is resolved and mark the location in the Discrepancy Register.

5.5.3. Type of Discrepancies and course of action for settlement

i) Rejection of materials due to non-conformity with the purchase order specification

- a) If the materials supplied by the supplier are not found, as per the specification contained in the purchase order, they are liable to be rejected during the process of inspection. If advance payment is not made to the supplier through banks, such rejected goods shall be sent to them as per their despatch advice.
- b) Excess supplies over the ordered quantity may also be returned back to the supplier, if we do not require this excess quantity. $\pm 5\%$ variation as per provision of Purchase Management System Manual Section 11.3.2. shall be accepted without any amendment to the Purchase Order. However if excess quantity beyond the above limits also needs to be accepted, the indenting department shall raise the Purchase Requisition and Purchase Section shall release covering Purchase Order/Amendment. Till such time regularizing P.O./ Amendment is not received the excess supplies shall remain provisionally rejected.
- c) In case payment is made to the supplier through bank, rejected materials may be returned to them after receipt of replacement supplies, through the carrier advised by the supplier, securely packed on freight to pay basis.
- d) Sometime rejected goods may otherwise be usable by the buyer although they are not strictly as per the ordered specifications, and as such these may be accepted, in exceptional cases and/or due to urgency of requirements, at a suitably discounted price. Purchase Executive in association with Finance, Stores and User departments shall facilitate determination of suitable discounted price and obtain supplier's consent or negotiate with supplier to arrive at a mutually agreed price so that materials are accepted. This type of issue may be sorted out with financial concurrence and approval of award approving authority.

ii) Goods received in damaged condition

- a) Sometimes goods are received in damaged conditions from the carrier (Open delivery certificate obtained) or found damaged from the intact packages received from the carrier. In case the price basis is FOR destination/CIF, matter is taken up with supplier for replacement supplies, free of cost. However, in order to protect right of recovery of supplier/their underwriters, preliminary claim under registered cover and Acknowledgement Due has to be lodged with the carrier and a copy of such claim is to be forwarded to supplier for further needful action at his end.
- b) In case, goods are insured, by the Corporation, claims for damages need to be preferred with the carrier and the underwriter. Matter may also need to be taken with suppliers. A close coordination has to be maintained with supplier, transporter and underwriters to get the materials repaired, if repairable, pursue settlement of claims and also fresh supplies from the suppliers. Claims for damages from intact packages are payable by the underwriters. If the value of damaged material is small supplier may furnish replacement supplies free of cost, in view of cordial business dealing. Instance may be there, when supplier is not ready to own the responsibility of transit damages, transit insurance being the responsibility of the Corporation. Fact however remain that the user departments need materials. Under such circumstances supplier may be asked to send replacement supplies on chargeable basis and for the corresponding value insurance claim shall be preferred. In view of this, there is no additional financial liability to the Corporation. If free replacement supplies are received Insurance Claim on the underwriter shall be withdrawn.
- c) If the damaged items are repairable, we may request the supplier to arrange rectification which may be preferably carried out at our Power Station/Unit and free of cost. If supplier demands repair charges, an estimate shall be obtained and furnished to Insurance Co to obtain their consent. Insurance Co. shall be too happy to agree to reimburse such expenses as their liability is reduced. If the repair/rectification is carried out by the supplier free of cost, Insurance Claim on the underwriter shall be withdrawn.
- d) The damaged items shall be sent to supplier if they desire. There may not be any difficulty if advance payment is not made. However if full or part payment is already made, the damaged materials shall be sent for repair at the risk and cost of Insurance Co (To and fro freight, premium for transit insurance and other Misc. expenditure such as packing and forwarding charges etc). To protect the interest of the Corporation an Indemnity Bond (Appendix 17) shall be obtained from the supplier and consent of underwriters. If the items are high value and substantial repair charges are expected, underwriters may associate their Surveyor for assessment of loss at supplier's works.

iii) Goods received short:

- a) In case of shortages from intact (sound) packages, replacement supplies are to come from supplier only, as underwriters normally do not entertain such claims since they are only liable for loss/damages to the consignment and if the consignment is received in outwardly sound condition, there is necessity to establish the loss had happened during transit Underwriter may entertain claims for shortages from intact packages, if it is proved to be a case of master-pilferage. In view of this, claim for shortages from intact packages are to be settled with the suppliers.
- b) However, claims for shortages against open deliver/shortage certificate from the carrier, are payable by the insurance companies. If the price basis is FOR Destination and transit insurance is the responsibility of supplier, claim for the materials short delivered shall be preferred with the carrier and details notified to the suppliers to arrange free replacement of supplies.
- c) In case the transit insurance is arranged by the Corporation, claim for compensation of loss preferred with the carrier and underwriters and details of shortage intimated to the supplier. If the value of shortage is small, supplier may furnish replacement supplies free of cost. Under these circumstances Monetary Claims on underwriter shall be withdrawn. If supplier disowns the responsibility for the loss, replacement supplies can even be arranged on extra payment, as there would not be any financial liability to the Corporation, as the underwriters shall make compensation to the extent of extra payment.

5.5.4. Follow up action for Settlement of Discrepancies:

As per the procedure for settlement of discrepancies contained in Section 5.5.3., matter shall vigorously be followed up with the supplier to obtain replacement supplies and get the damaged materials repaired/rectified, if repairable. Similar efforts need to be made for settlement of claim with the carriers/underwriters. This shall not only facilitate prompt adjustment of supplier's advances but also make available critically required materials to user departments.

5.5.5 Receiving Documentation after settlement of Discrepancies

Upon receipt of replacement supplies or items, after repair/rectification, shall be inspected by user department with reference to specifications contained in the P.O. and if found acceptable they shall be taken on charge through Stores Receiving Voucher. In the new SRV, reference of the past SRV shall be indicated under which supplies were rejected or found short.

5.5.6. Review of Discrepancies

In order to ensure that number of discrepant cases do not increase and also not to continue for a longer period, a monthly report shall be generated with age analysis of cases pending for settlement for 3 months to 6 months, 6 months to a year and above one year. This list,

especially of old cases shall be reviewed by DE (Stores) every month and every three months by Head of Contract & Material Department. During HOD review, DE (Stores), DE (Purchase) and Sr. Accounts Officer shall also be associated, so that an action plan is drawn to liquidate old cases.

5.5.7. Review of old rejection cases by Committee:

If in certain cases, suppliers are not responding for replacement of technically rejected materials, matter for review may be referred to Committee comprising of representative of Stores, Finance and User Department. Committee may recommend acceptance of items with minor repair/modification to be carried out at our own workshop or to recommend alternate use of items etc. If any balance payment including security deposit of supplier is available the same shall be adjusted towards rectification /modification expenses. Purchase Section shall, however, ensure that future dealings with such suppliers are to be discontinued.

5.6. Scrutiny of SRV, Binning, Billing & General Instructions

5.6.1. The Stores Inspection cum Receiving Voucher shall be scrutinized by the Physical Custodian to the effect that

- (a) The materials have been duly inspected and accepted and Inspection Engineers have certified the same by putting their signatures in the relevant column.
- (b) The quantities accepted in SRV tally with quantities received by Custody Group.
- (c) The unit of measurement (UM) is correct and identical to the one already appearing in stock ledger/ Code catalogues. A number of discrepancies in stores arise due to confusion of UM while recording or issuing the materials to user departments.
- (d) The specifications indicated in SRV are in line with specifications in stock ledger/ Code Catalogue.
- (e) If the accounting unit is set, each set consists of requisite items/quantities.
- (f) All materials being handled are in good condition
- (g) If part of quantities/items, have been issued by Receiving and Despatch Group to meet critical/emergent requirements of user departments, relevant Stores Requisition-cum-Issue Vouchers are received by Custody Group for further needful action (allotment of control number and posting in stock-ledgers).

5.6.2. The custodian shall check up the bin location from stock-ledger folio/computer master and reflect the same in relevant column of SRV. If the item is new he shall arrange opening of new folio in the stock ledger and decide proper bin location and reflect the same in SRV. There may be a situation that there is insufficient space in the already available bin to accommodate the whole of the new receipt. A new location preferably in the vicinity of old location shall be identified and both old stock and new receipt kept at the new location and changes of location incorporated in the stock ledgers/ computer master. In exceptional cases, new receipts may be binned at the new bin location and new bin also indicated in the stock ledger/ computer master.

- 5.6.3. While assigning a bin location to an item, it shall be ensured that heavier items are kept at the lower rungs of the racks and lighter on higher ones. It shall further be ensured that fast moving items are stored at easily accessible place so that faster issues are made.
- 5.6.4. It is to be ensured that materials are stored at proper location in an orderly manner so that counting can be done without removing the materials. If the materials are stored in the open yards, it shall be ensured that these are properly stacked and code numbers are reflected with paint etc. for future identification. Such pieces bearing code/SRV number shall be issued at the end.
- 5.6.5. Binning/stacking of items shall be done in such a way that the principle of 'First in First out' is followed. New receipts shall be so arranged at the racks that these be last to be selected for issue.
- 5.6.6. SRV shall be posted in stock ledgers/computer master. Balance before posting shall be indicated against each item.
- 5.6.7. Company Bills are to be processed and sent to Accounts along with requisite documents for arranging payments.

5.7. Receipt of materials from user departments:

All materials, which have been issued to user departments for certain jobs and left over quantities no longer required by them, shall be returned back to stores. Similarly scrap arising, unserviceable assemblies/equipment, worn out spares, which cannot be economically reconditioned, shall be returned to stores as scrap materials. The user departments shall draw the quantities, which are sufficient to meet their immediate requirements. If at all some surplus items are with them, return to stores shall be encouraged, as some one else at power station might need them critically.

5.7.1. These returns can broadly be classified:

- a) Items returned as new and accepted as new (surplus quantities with user departments for any immediate needs, which had earlier been drawn for anticipated consumption)
- b) Unit replacement assemblies/sub-assemblies returned to stores after repair/ rectification for future use. Such items are also inspected as above. Items like expensive motors, pumps, rotors etc fall in this category.
- c) Capital and fixed assets items which are surplus with user department and are in reusable conditions, items like furniture, air-conditioners etc.
- d) Scrap and unserviceable materials generated in the plant specially worn out spares, cable cut pieces, empty drums, Steel cut pieces, turning/boring scrap in the workshop etc.

5.7.2. Stores Return Note

Materials to be returned shall be brought to respective stores along with duly filled in 4 copies of Stores Return Note (Appendix- 23). It is to be ensured that reference of Stores Issue Voucher under which items for return at a) to d) classified as above were initially issued by Stores, is invariably indicated to facilitate pricing by Accounts.

- 5.7.3. The department/agency returning the material shall ensure that the details of materials being returned are incorporated in the 'Incoming Materials register' of Security Check-post of the Stores and Sl. No. of register shall be mentioned on back of last copy of the Stores Returned Note and duly signed by security officials.
- 5.7.4. The custodian shall scrutinize the Stores Return Note (SRN) to ensure that all relevant details are filled up (details such as transaction code i.e. classification of return, indenter code, cost code centre, quantity proposed to be returned, material code, material description unit of measurement), ascertain the quantity by counting, weighing or measuring as the case may be, get the materials inspected by executive in-charge of custody or by user department, if returned by contracting agency. After completing quantity and quality check, quantity accepted column shall be filled and control number is allotted (Appendix 23A) Register for allotment SRN Control No. & Date which shall be volume-wise of code catalogues.
- 5.7.5. After binning/stacking the materials at the proper location, the custodian shall post the SRN in stock ledger/computer master and record location and balance before posting in the appropriate column
- 5.7.6. One copy of SRN shall be handed over to user department after acknowledging the receipt and allotment of control number by the custody, a copy is retained in stores for records whereas two copies shall be sent to accounts department (one for costing and the other for Price-Stores-Ledger)

5.8. Issue of materials:

Issue of materials shall be made by stores only upon presentation of duly filled (details to be filled are- transaction code, indenter code, cost code centre, Material code, description of item, unit of measurement, quantity requisitioned etc) in and approved Stores- Requisition –cum- Issue Note (Appendix – 24).

5.8.1. Stores-Requisition-Cum-Issue Voucher (SIV)

This document has dual functions i.e. requisitioning document for user departments/indentors and issue document for Stores. User departments are required to fill up Stores-Requisition-cum Issue Voucher including quantity requisitioned and present the same to Stores who shall fill up other information including quantities issued. Two copies of such SIV shall be handed over to indenter/user department (one for their records and one for security gate if separate gate pass is not issued) immediately after issue of materials whereas two copies are sent to Finance &

Accounts Department (One for Price- stores-ledger and the other for costing), one copy shall be retained for Stores records.

5.8.2. Authority for approval of Stores Requisitions:

Stocks in stores represent money and should not be wasted or improperly used. It shall therefore be essential that appropriate authority approve any issue from stores. It may be imperative that all user departments shall furnish to stores, Names. Designations and specimen signatures of persons empowered to approve Stores Requisitions, falling under various categories i.e. issue for use in plant, issue on loan to other organizations or the other units of the organization, issue on out-right sales, issue to contracting agencies free of cost or chargeable basis etc. In order to exert control on issues, not only the number of such persons should be minimum workable for each department but also it should be at appropriate level.

5.8.3. Up on receipt of duly approved SIV custodian shall check up that:

- a) Those are properly filled in (Material code number, description, unit of measurement, quantity requisitioned, cost code, name of indenting department and its code and other relevant information)
- b) Quantity demanded is as per existing norms, if any (Certain items may be issued only to the extent of worn out/scrap quantity is returned- items like tyres)
- c) Those are approved by appropriate authority.
- d) Changes/corrections are duly signed by approving authority (especially changes in quantity requisitioned).
- e) In one SIV items of one store- house/ main group of codification are requisitioned (User departments shall be informed regarding the division of Custody Group in Stores Section to enable them to prepare and present requisitions on the concerned custodian)

5.8.4. Identification of requirement and Issue of Materials:

a) Identifying the Materials for Issue:

Provisions are made in SIV for code number and description of materials, and this shall be required to be indicated by user departments. In practice it may, however, be noticed that user departments sometime may not be in a position to adequately and correctly identify their requirements. The prudent custodian is expected to provide assistance to user departments in properly identifying the items and in case of non-availability, suggest them alternatives. As far as possible, efforts shall be made to supply the materials sufficient to meet immediate requirements. It shall therefore be essential to provide user departments with copies of up-to-date code catalogues, spare- part list and other relevant literature.

- b) After verifying necessary details of SIV, the storekeeper/custodian shall check up the availability of materials from stock ledger or computer master, as the case may be, and note down the bin location numbers. The requisitioned quantities are picked up from the bin location, handed over to the representative of user departments and their signatures, as acknowledgement of receipt, are obtained on appropriate column. SIVs shall be allotted control numbers (Appendix 24A) for which code catalogue volume-wise control registers shall be maintained.
- c) In case materials are required to be consumed within the plant area, additional copy of SIV (2 copies are handed over to the representative of user department after issue of materials) provided to user departments may be handed over to the security personnel posted at stores' check- post. In case goods are to be taken outside the plant area, an Exit Gate Pass is issued which is to be approved by an executive of stores, at appropriate level. In case additional copy of SIV cannot be used for the purpose of security gate pass, separate Material Gate Pass shall be provided by Stores (example items issued from Receipt and Despatch to meet emergent requirement or issue of bulk materials against one SIV requiring number of trips to remove entire quantity issued).
- d) SIVs complete in all respect are posted in stock ledgers and quantity before issue is filled up in appropriate column.
- e) In case of non-availability of stock either partly or fully, the custodian shall certify non-availability on the copy of Stores Requisition cum Issue Voucher so as to enable user departments to take further needful action in the matter.

5.8.5. Issue of second hand materials

Unit replacement assemblies/sub-assemblies returned to stores after repair shall be issued first as and when required by user departments in future, unless it is specified in Stores Requisition that such materials are not acceptable due to certain reasons. Head of user departments shall approve such requisitions. This is essential to ensure that used and repaired materials are not piled up in stores.

5.8.6. Timings for issue of Materials

The normal issues from Stores shall be made from 9.00 to 1300 hours (or first half) so that the Stores personnel during the second half on receiving the materials alongwith UR from Receipt & Despatch Group, complete Inspections binning and posting of SRVs, SRNs and SIVs. In order to met the exigencies, in exceptional cases, issue shall be made beyond the normal issue hours also but such requisitions shall be approved by the Superintending Engineer/HOD of user department confirming the urgency of requirement.

5.8.7. Issue of Materials after normal working hours and off day:

In order to meet the emergent requirement of user departments, services of Stores shall be available round the clock. Stores shall be opened after normal working hours or on off days with the permission of senior executives of Materials Management. A request for urgent issues shall be made by Head of User Department to DE (Stores) to open the Stores for emergent issues, who shall in turn inform the Security Officer. A store executive while drawing the keys from the Security office shall record the reasons for opening of the Stores. User departments are expected to furnish Stores Requisition for drawing the materials. However in exceptional cases, the person drawing the materials may sign in the loan register and on the next working day submit the prescribed SIV for regularizing the issue. Immediately after meeting the requirement of user department Stores shall be closed and normal procedure in this connection shall be followed (detailed procedure in chapter warehousing and security of stores).

5.8.8. Stock transfer to other Units/Power Station of the Corporation:

- i) Transfer of materials from one power station/unit to another power station/ unit shall be done through Stores Transfer Note (STN) which shall be prepared in five copies (Appendix – 25). Two copies shall be sent to receiving station/unit (Consignee). Receiving power station/unit shall retain one copy of the STN for their records and send the second copy back to despatching power station/unit (Consignor) as token of having received the materials in order. Custody Group shall retain one copy of STN whereas two copies shall be sent to Finance.
- ii) Such transfer shall be done in consultation with user department and shall be approved by Chief Engineer/ Head of Unit.
- iii) However, if the items are formally declared surplus/redundant no approval as at ii) above is needed, as items are declared surplus only after consultation with user departments and approval of Chief Engineer/ Head of Unit, before such lists are circulated to other units of the Corporation.
- iv) The custodian shall prepare STN and it shall be ensured that all relevant details such as Name of Receiving Unit, Material Code, Description of Materials, Unit of Measurement, quantity etc are properly filled in.
- v) If duly authorized representative of receiving unit is available, his signature are obtained in the relevant column and after allotting control number (Appendix 25A- STN Control Registers shall be maintained Code catalogues volume- wise), two copies alongwith materials and Gate Pass shall be handed over to him if he is to carry the material with him and/or transport through departmental vehicle.
- vi) However, if materials are required to be despatched through public carrier by rail/road, the services of Clearance & Despatch Group are requisitioned. If the materials form small load, these shall be handed over to them alongwith two copies of Stores Transfer Note and Stores Delivery Slip. Consignee copy of LR alongwith two copies of Store Transfer Note alongwith

Store Delivery Slip shall be handed over to the representative of receiving unit or may be sent to them by post in such a way that it is delivered to them promptly. If the materials are voluminous and heavy and form a truck-load, C&D Group is requested to arrange placement of appropriate type of truck for loading. Both Gross and Tare weight of the truck shall be carried out to find out the net weight of materials. Weightment as well loading shall be carried out in the presence of Security personnel. Necessary Exit Gate Pass shall be issued by C&D Group or Custody Group.

5.8.9. Issue to other Organization on Loan or out-right sale basis.

i) Issue on Loan basis:

Issue of materials on loan basis to other organization shall be made only after the approval of competent authority as per delegation of Power. The Custody Group shall prepare the SIV giving reference of approval of competent authority for loan issue (A copy of approval of competent authority shall be furnished to Accounts along with copies of SIV meant for them). The receipt of materials shall be acknowledged by the representative of the organization drawing the material by signing in appropriate column of SIV and also in the Loan Register. Loanee shall be advised to return the materials within the stipulated time. Stores shall issue an Exit Gate Pass for Returnable Materials. When the loan materials are returned the same is/ are taken on charge by raising the SRV, giving reference of SIV under which the goods were issued on loan basis. Necessary entries are made in the records i.e. Loan Register, Returnable Material Gate Pass Register. When such materials enter at the unit, record maintained by the Security for returnable material gate passes are also updated.

ii) Issues on out-right Sales Basis

Sometime materials may be issued to other organization on out-right sales. Such issues may be meeting urgent requirements of spares of other power utilities or issue of certain items, which are formally declared as surplus. Such issues including modalities shall be approved by competent authority as per delegation of powers. After confirmation from Accounts regarding receipt of payment issues shall be made by the Custodian. SIV shall be prepared by custody and so is the non-returnable Exit Gate pass.

5.9. Issue of Gate Passes and related records thereof:

In order to ensure that no unauthorized materials move out of stores, the following systems of gate passes shall be followed:

5.9.1. Issue of materials for use within the plant area:

- a) Two copies of Stores Issue Voucher shall be handed over to the indenting department while issuing the materials, one for their records and the other to be handed over to the security personnel at the stores check post. The security guards, after having checked the materials with the copy of Stores Issue Voucher, entering details in their records, shall allow the material to be taken out of Stores premises.

- b) In case additional copy of SIV cannot be used for the purpose of security gate pass, separate Material Gate Pass shall be provided by Stores (Example: items issued from Receipt and Despatch to meet emergent requirement or issue of bulk materials against one SIV requiring number of trips to remove entire quantity issued).
- c) Material Gate Pass (Appendix 26) shall be prepared in triplicate, one copy shall remain the book as Stores record, 2 copies (perforated) shall be handed over to the indentor alongwith the materials issued, who shall present one copy at the Security Check Post of Stores and keep one copy for their records. Gate Pass books shall be pre-numbered.
- d) Since Material Gate Pass is issued for the materials to be taken for use within the plant area, any executive/officer of Stores shall be authorized to sign this document. Specimen signature of executive/officer of Stores shall be provided to Security by Divisional Engineer (Stores).

5.9.2. Issue of materials to be taken outside the plant:

- a) For materials to be taken outside the plant area, an Exit Gate Pass shall be issued. Since the materials are taken outside the plant area, authority for approving such gate passes shall rest at Divisional Engineer/ Stores.
- b) Materials going outside the plant shall broadly fall in the following categories
 - i) Materials issued by Stores against SIV for use at location outside the plant area (location like township, hospital etc.)
 - ii) Materials issued by Stores for other units of the Corporation against Stores Transfer Note
 - iii) Rejected and damaged materials sent to Suppliers for replacement/ rectification
 - iv) Equipment/ Instruments/ Assemblies/ Sub-assemblies sent to OEM or other parties for repair/rectification.
 - v) Empty cylinders sent for refilling.
 - vi) Salvage handed over to underwriters after settlement of insurance claims.
 - vii) Scrap materials handed over to the Purchasers against Sale Order/Delivery Order.
 - viii) Any other type of materials being taken out of Stores duly documented and authenticated.
- c) The above materials may be going out both on returnable and non-returnable basis.
- d) A proper record shall be maintained for returnable issue gate passes. Their return is followed up vigorously and entries made in security office records and stores records as and when such goods are received back. A periodical review is done between stores and security and return of unduly delayed materials are highlighted and action plan drawn to ensure faster return.

- e) Apart from DE (Stores) and HOD of C&M Department one or two other Senior Executives/Officer of C&M Department (depending upon exigency of work and location of Stores) may be authorized by the Chief Engineer/Head of unit to approve Exit Gate Passes and necessary order in this regard shall be issued alongwith specimen signature of executives. Such materials may be allowed to go out of plant only from one designated gate.
- f) Exit Gate Pass (Appendix 27) shall be prepared in 4 copies, one copy shall remain in the book (white colour), 3 copies which are perforated shall be handed over to the person taking the material who shall hand-over 1 copy (pink colour) at the Security Gate at Stores, 1 copy (light blue and original) shall be handed over at the designated exit gate and 1 copy (white), shall be carried by him for his records.
- g) Custodian shall ensure that necessary entries are made in the Register for Returnable Exit Gate Passes (Appendix 28) before releasing the Exit Gate Pass.
- h) Security Personnel at the Designated Gate shall check the material and enter the details in the Out going Material Register (for non returnable exit gate passes) and Returnable Exit Gate Pass Register (if gate pass is for returnable materials) Serial number of this register shall be indicated in the copy of Gate Pass being carried by the person who is taking the material out of plant.
- i) The Engineering In-charge shall issue Exit Gate Passes for the materials being taken out by the contracting agencies in the plant and Stores shall not be involved in such materials.
- j) It shall be the responsibility of Stores to arrange sufficient stock of Exit Gate Pass Books which shall be pre-numbered and available in set of 50 (each set of 4 copies- 3 to be perforated and coloured copies as e) above)

5.10 Issue of the materials on spot delivery basis

During emergencies the Station Head can authorize Divisional Engineers (Maintenance) to requisition for direct delivery of spares at work spot and Divisional Engineer (Stores) will arrange to comply with such requisitions.

With the functioning of Local Area Network (LAN) such requisitions for spot delivery can be entertained as follows:

- (a) ADE (Maintenance) will transfer Stores Issue Voucher to ADE (Stores) on LAN duly mentioning Code No./ Folio No./ Description of Materials/ Quantity required/ Work Order No.
- (b) Divisional Engineer (Stores) will authorize the issue and arrange for Issue and Transportation of Materials by Stores Personnel to works spot and obtain proper authentication on SIV and regularize the transaction on the same day. Detailed instructions in this regard are to be issued separately.

CHAPTER-6

**WAREHOUSING, STORAGE AND
SECURITY**

6. Warehousing, Storage and Security

6.1. Warehousing:

- 6.1.1. It has to be ensured that all materials received in stores are properly stored to avoid deterioration/losses and also to locate promptly when required to be issued. Stock Ledger posting of all receiving and issue documents shall be done promptly and distributed to concerned departments. This shall help to keep book balances in conformity with physical balances most of the time.
- 6.1.2. Stock maintained by the organization shall be distributed among different enclosures (termed as storehouse and stock yards) to be provided with appropriate racking and handling facilities to store different sizes, shapes and weights of materials.

6.1.3 BIN Location System

A suitable bin numbering system shall be developed. Open yards shall also be numbered and divided into segments so as to determine proper location. Location system may however be fixed, random or combination of both, depending upon local needs. However combination of both fixed and random locations shall be preferred.

Location system plays a very important role in warehousing operations and as such need to be elaborated in details

(a) Storehouse Bin location system:

In large size stores of major power stations of the Corporation, many thousand items may be kept to meet requirements of various users. It shall be imperative that a systematic binning scheme is organized so that items are located promptly as and when need arises and also optimum use of available space is attained . Bin locations need to be reflected on each folio of stock-ledgers or entered into computer master, so that anybody who is issuing the materials knows exactly where the items are lying in stores.

(b) Requirements of systematic Bin location system are

- (i) Storehouse area shall be divided into section, each one can be identified by a letter or number
- (ii) Each stack of storage fixture in a section is allocated a letter or number commencing from one end.
- (iii) Each bay or shelving or racking forming a stack is similarly identified.
- (iv) Finally each individual bin has a number
- (v) Open yards are also needed to be divided and identified.

A location of an item in storehouse is as good as an address in the form of House, Street, Town and District.

Location number for each item is marked with pencil on the stock ledgers, when the random location system is in practice, this helps in changes without spoiling cards/ folio papers.

c) Fixed location system:

This denotes traditional arrangements whereby place of storage of each item shall be more or less fixed or static. Advantages of the system are:

- Store staff become accustomed to the general layout of the materials and by experience remembers probable location of items.
- Similar nature of items as per code catalogue are stored together

Limitation of system:

- Sufficient place must be set apart to provide for reasonable variation in the quantity of each item.
- Use of available store space to optimum level shall not be possible- many of bins may be empty due to non-availability of stock and for many items it may not be possible to assign bin location due to shortage of space.
- Practically items may not be binned in order of code vocabulary due to different sizes, shapes and weight. For such type of items, different types of storage arrangements may be needed.

d) Random system:

Under this system location/bin of items shall keep on changing, based upon availability of space and details are incorporated in stock-ledgers/computer master. The system ensures efficient utilization of space in stores and is useful in storehouses where movement of materials is fast.

Main disadvantage is the majority of items cannot be located without reference to stock ledgers/ computer master, which contains location details.

e) Combination of fixed and random location system:

Random system with some degree of broad fixed location shall be of most practical advantages. In this system storage area of one category of items of similar nature shall be more or less fixed but exact bin number or rack/shelves shall keep on changing based upon space availability.

For example, all types of bearings shall be in the same storage area/storehouse but rack/shelve/bin for each type of bearing shall not be fixed. Bearing can be stored within that area on any shelve/rack, which has empty space. It shall, however, to be ensured that all bearings of a particular type and size have to be at one location only. This shall help in storage of similar type of materials in one store area.

6.1.4 Facilities need to be developed for air-conditioned storage of electronic items and also humidity free stores room for storage of items like electrodes, motor winding etc. (by providing de-humidifier). Similarly facilities shall be developed for storing heavy items and abnormally big items. Such stores shall be provided with EOT crane for handling heavy items.

6.2 Storage & Handling of Materials

Whereas an inefficient and poorly organized warehouse is an irritant to user departments and Stores personnel, a good layout and good storage methods shall yield the following benefits

- i) Ready accessibility of major materials, permitting efficient services to user departments
- ii) Efficient space utilization and flexibility of arrangement
- iii) A reduced need for materials handling equipment
- iv) Minimization of material deterioration and pilferage
- v) Ease of physical counting resulting in faster stock verification/stocktaking

6.2.3 In view of importance of physical operation of Stores, separate Chapter on Materials Preservation, Material Handling and Safe Operations (Causes of Accidents and Precautions for Prevention) is added to this manual. However following issues may also be taken care while stacking the materials:

- (a) Materials in Stores, under no circumstances, shall be stacked on the floor of store-houses/ open yards. In case stacking on floor of heavy and voluminous materials become unavoidable, adequate and appropriate dunnage shall be used so that an air space of at least 50 mm is available above floor upto the bottom of materials stacked, to facilitate cleaning, dusting and control of micro-organism. Same care shall be taken while stacking the materials in the open yard. The dunnage shall further facilitate safe loading and unloading operations (removal and fixing of slings shall be safe and convenient. Even loading and unloading through forklift truck shall be very convenient).
- (b) The size and arrangements for access to such stacks should be such to permit easy visual inspection from all around for ascertaining condition and quantum of the stock as also for cleaning/dusting and preservation activities.
- (c) Materials stacked in open and prone to deterioration due to atmospheric conditions shall be properly and securely covered with tarpaulins.
- (d) Materials on storage rack or open yard shall be stacked in such a way that counting of quantity could be done without any movement of materials to facilitate faster stock-taking/ stock verification.

6.3. Security of Storehouses & Materials:

6.3.1. Security of Buildings and Stockyards:

- (a) Storehouses shall be of reasonably good constructions. Door provided should be restricted to the minimum number necessary for efficient operations and capable of being securely fastened and locked. The normal practice shall be to provide roller shutter. For security reasons such big doors shall be opened only when there is need to allow entry of vehicles or handling equipment. A small door shall be provided separately alongside the roller shutter so that employee can have easy access during time when it is not necessary to have the main door opened. Such small doors shall have closing and locking facilities from inside.

- (b) All windows and skylights must be capable of being securely fastened. In case of any apprehension of unauthorized entry (e.g. where the windows over look a public highway), additional protection in the form of MS bars or wire mesh may be advisable.

The internal layout shall usually be so arranged to provide an Issue Counter or issue bay segregated from the main store area and, wherever possible, enclosed. Those visiting stores for issue of material should be restricted at Issue Counter. Stockyards should be surround by an adequate fence with locking gate and the number of gates should be restricted to what is necessary for effective working. The recommended fencing consists of four feet brick wall and above these four feet barbed wire fixed with angles grouted on the wall. Height of the fencing may largely depend upon the local conditions. While deciding the construction of wall Security Department must be consulted. If the open yards are big and spread over a considerable area, provision for security watch-towers may be considered.

- (a) There shall be proper lighting arrangements both outside storehouses and open yards. Subject to size of the yard, conventional lighting shall best be placed round the perimeter, arranged to shine inward. For larger stockyards, modern system of tower mounted floodlights, the type found in the stadiums, may also be considered.
- (b) Storage area shall be properly leveled and connected with drains and water line and shall be away from hazardous area (area where there are chances of fire or explosion)

6.3.2 Access to premises:

- i) The Custodian shall be responsible for the care and custody of all materials from the time of delivery until the time of issue. He therefore shall have the authority not only to exercise supervision over his own staff, but also over all other persons who have occasions to visit the premises for any purpose whatsoever.
- ii) In the interest of security, access to storehouses and stockyards must be strictly limited. Apart from storehouse employees themselves, people collecting goods should not normally be allowed to enter storage area, but kept on the public side of the Issue Counter, drivers and other making deliveries confined to receipt dock.
- iii) Similarly, in a stockyard, personnel not employed in the yard should not be admitted unless they are in charge of transport, and then only under the supervision of member of the Stores staff. Some time it may become necessary to take members of user departments to the storage area for identification of materials or issue of heavy/larger quantity materials, in these situations an authorized representative of Custodian or he himself shall accompany them.

6.3.3 Segregation of pilferable items

It shall be prudent to take extra security precautions in respect of 'attractive' goods, which are generally recognized as being especially subject to pilferage (the type of articles referred to in the paragraph below on 'marking' which have domestic use and ready market for disposal).

Separate lockable enclosures or cup-boards are often provided inside the main stores for commodities of this kind, and they are placed under the care of a storekeeper who is entrusted with the keys and accepts responsibility for safe keeping of the stock.

6.3.4. Marking the Stores:

In order to minimize the risk of pilferage, it shall be advisable to mark stock items with the name of the organization or another convenient symbol of identification so that, if anything is stolen, it may subsequently be traced and the mark will serve to prove that the article is the Corporation's property. Wherever possible, Purchase Department shall be asked to ensure that requirements of marking are included in the scope of purchase order and the supplier does the work. In case this is not possible, sometime, the marking may be undertaken in the storehouse. This marking is done for the items suitable for domestic use or the lucrative items, which have ready market (items like hand tools, electric lamps, fluorescent tubes, crockery and cutlery, towels etc. For valuable portable equipment such as micrometers, surveying instruments, ammeters etc., and for such items as vehicle tyres and batteries, the principle of marking may well be carried. As far as possible, it is further to be ensured that fresh issue of such items are made only when the worn outs or those whose useful life has expired, are return back to stores.

6.3.5. Locking Arrangements of Store-houses and Open Yards and Custody of keys

Materials worth crores of Rupees shall be lying at in Stores at power station. It is therefore important that a system of locking and custody of keys shall be in place.

The following system shall be followed

- (a) A key register shall be kept at the Security Office at the Main Gate of the plant. The issue of keys at the beginning of the working day and deposit of keys at the close of work each day shall be recorded in this register. A key box made of the steel shall further be installed at the security office, which shall have sufficient hooks for hanging the key bunches. Hooks shall be serial number and so shall be the key bunches (one bunch of keys shall have all the keys of one custody including the open yard but excluding the keys of cup boards etc. if any of cup-boards shall be kept at a secured place within the Store-house building). Each bunch shall further have metal tag indicating serial number of the bunch and also a ring for hanging.
- (b) At the close of the work at each day the custodian shall ensure that windows, small door if any, cupboards etc. are properly secured/locked. The custodian shall further ensure that no one is left, inside the Stores shed/building. After completing the above checks the custodian shall close the main door/shutter of the store-house/shed, lock it and seal with the help of sealing pliers, sealing wires and sealing tablets (Sealing pliers with emblem of Corporation shall be arranged from the market).

- (c) The custodian or his representative shall go the Security Office; enter the details (date and time keys deposited, Serial number of the keys and total number of keys in the bunch, name and designation of the person who has deposited the keys and his signature) in the key register. The security official after checking the keys shall put the bunch at the designated hook.
- (d) In the same way various custodians shall lock their sheds/store-houses/yards, seal and deposit the keys at the Main Gate office of Security. One of the executives of Stores shall be responsible for closing of Stores, deposit of all the keys, locking and sealing of the key box (Sealing pliers shall also be put in the key box). The executive responsible for closing shall certify in the key register that that all the stores have been closed and keys placed at the designated hooks for all the stores. Similarly Security official responsible for closing shall also certify that all the seals after closing are in order. DE (Stores) shall circulate the details of duties of executives for closing of stores for a month. Duty chart shall be finalize in such a way that responsibility of closing is almost equally assigned to all the executives/officers working in stores. If the designated executive is not available on the particular day, executive responsible for closing a day before shall continue.
- (e) During lunch break, custodian shall lock the stores, if required, put paper seal on the locks and keep the keys with them. However, after closing hours, store personnel shall not be allowed to take the keys to their houses.
- (f) At the beginning of the day, first person reporting for duty can open the key box and sign in the key register. Before opening the key box, he has to ensure that the seal is in order. Similarly all the custodians after drawing the keys and before opening the locks shall ensure that seals of their respective stores are in order. If any sign of tempering are notice, they shall not open the Stores and shall immediately inform the Security.
- (g) All the duplicate keys with serial numbers shall be entered in a register available with DE (Stores) and kept in a box at a safe place with locking and joint sealing arrangement involving Security Officer.
- (h) If any key is lost, the lock shall immediately be replaced after necessary investigation and under intimation to Security Officer.
- (i) In case of emergency issues at odd hours or on close/holidays, Stores may be opened with the permission of competent executive of Stores/HOD of C&M Department and Security Officer. One of the Security officials on duty shall accompany the stores representative and witness the issues. These details shall be recorded in the key register.

6.3.6. Posting of security Personnel:

Security personnel shall be posted for watch and ward duty of store- houses and open yards. On the Gate of store, a security check post shall be established for checking of all incoming and outgoing materials and also maintaining their records. Such security personnel are assigned round the clock duty and are required to undertake patrolling specially after normal working hours of the stores. Occasionally, a surprise visit shall also be made by senior officers of Stores to see for themselves the alertness of the security personnel.

6.3.7. Record keeping by the security Personnel:

The security personnel, posted at the check post at the entrance of stores shall maintain two registers, one for recording details of all incoming materials and the other detailing outgoing materials (for outgoing materials, two registers shall maintained; one for issue for consumption within the plant area and the other for materials going outside the plant area against duly approved Exit Gate Pass). The security at Main Gate shall maintain the records of stores opening, drawing and depositing of keys etc. by the authorized representative of stores, a register for recording details of all incoming materials, a register to record outgoing materials on non-returnable basis and also a register for outgoing materials on returnable basis.

CHAPTER-7
STORES ACCOUNTING
&
STOCK- TAKING

7. Stores Accounting & Physical Stock-taking (Stock verification)

7.1. Stores Accounting

Stores records shall be maintained to show particulars of receipt, issue and balances of each item in stock at a given time. The following shall be some of the reasons, apart from basic need of accounting, for maintaining stock records:

- a) To know stock of any item in stores without resorting to physical counting.
- b) To establish link between physical stock and Stores Account Records (Priced Stores Ledger maintained by Accounts Department)
- c) To facilitate materials planning and provisioning.
- d) Supply information for stock- taking.
- e) To provide information to store- personnel regarding location of items.
- f) Serve the purpose of price list as purchase prices and sources of supply are entered in provisioning card (History Card).

7.2. Hand-Posted Stock-Recording System

7.2.1. Stock- Ledgers

These shall be in the form of registers having page number and indexing system. Due to their inherent limitation, this type of record keeping shall be continued in small power station where range of items is not very large. Once the codification scheme is implemented, record keeping in the form of ledger becomes difficult, as ledger folio may not be in the order of sequence of codes. New code may keep on adding on days to day basis. The stock record maintained through Stock- Ledgers can only meet the accounting requirement and cannot be used as readily available data for inventory control.

7.2.2. Loose Leaf Books

These shall be loose sheets filed in binder specially made for this purpose and mostly maintained by Accounts for price stores ledgers and with modification in the size can also be used for recording of stores transaction. Fresh cards can be added anywhere in between without disturbing remaining cards. Most advantageous for security of records and easy to post them Fresh cards can be added anywhere in between without disturbing remaining cards. In this system also the records cannot readily be used for inventory management although cards can be arranged in the binder in the order of sequence of codes.

7.2.3. Visible Kardex Cabinet

These are widely used in stores records in medium size and large stores. In the cabinet cards are held in hinged folders set in metal trays, which fit into cabinet designed on to desk. The cards are so arranged that although they overlap, a space at bottom of each one is always visible and usually show the brief description of item, code number, part number, unit of measurement and various control level. Kardex Stock cards (Appendix 29) apart from the above information

which is visible, provides details of various quantity of an item received from the suppliers i.e. SRV No. & date, quantity and name of supplier, details of issue i.e. SIV No. & date, quantity and name of indenter and balance available in stock. On the top portion of the stock card there shall be provision of description of item, Unit of measurement, item Code No., Part No., if any, various inventory control levels if item is a stock item i.e. Re-order Level, Reorder Quantity and Minimum Stock.

The stock Card in the Kardex cabinet is also known as bottom card as it is placed on the bottom. In the Kardex cabinet there is always provision for putting another card on the top which is known as Provisioning Card (History Card) and provides details needed for the material planning i.e. Description of item, Unit of Measurement, Item Code, Item Part No. if any, various inventory level as above, Purchase Requisition No. & date, Quantity, Requisitioned, P.O. reference i.e. name of supplier, Quantity, Unit rate, Quantity received against the order, Quantity outstanding against the order. There shall also be provision in the Provisioning card to indicate monthly and yearly consumption (details for the current and last two financial years). These details are pre-requisite of any inventory control system (for specimen of Provisioning Card refer Appendix- 30)

7.2.4. Each custodian shall have Kardex pertaining to his group and ensure

- a) Day to day posting of basic stores documents i.e. Stores Receiving Voucher, Stores Issue Voucher, Stores Return Note, Stores Transfer Note, Adjustment Vouchers pertaining to stock-taking etc. shall be done in the stock card (bottom card) and
- b) Recording of details of Purchase Requisition, P.O. reference, Source of Supply and SRVs. shall be done in the provisioning card (Top Card). In addition data of consumption on monthly basis is recorded in the relevant column. Whereas details at (a) shall meet the accounting requirement of Stores and information at (b) shall be used for inventory control and determining optimum levels of stock, meeting both financial and operating requirements

Normally receipts are posted in Kardex with red ink and issues with blue ink. "Kardex" is kept at the respective Bins of all indoor stores material and is called the Bin Card. "Kardex" for all outdoor stores material is maintained at the respective section offices of the custodians. History Cards are also maintained at the respective Section Offices of the Custodians.

7.2.5. Computerized/online system of Stores Accounting:

Even after implementation of on-line system of Stores Accounting, it shall be advisable to continue with the manual system of Kardex posting for few years until the on-line system is fully stabilized.

7.2.6. Priced Stores Ledger

Store stock records shall reflect quantitative data i.e. quantity received in stores, quantity issued and quantity available in stock at a given point of time. Identical records are also maintained by Accounts but with additional information of value of each transaction and value of quantity available in ledger and that is why it is called Priced Store Ledger (PSL). In order to enable Accounts to update PSL copies of all basic store documents i.e. Stores Receiving Voucher, Stores Issue Voucher, Store Return Note, Store Transfer Note, Adjustment Voucher shall invariably be furnished to them. In order to ensure that no document is missing with Accounts, Stores shall furnish on the beginning of the month last control number on the last day of the month for above documents. Accounts Department after reconciling the data at their end shall furnish to Stores details of any missing documents. It is the responsibility Stores to provide missing documents so as to enable Accounts to complete PSL for the month. In order to reconcile both the records on day-to-day basis, provision is made in all the documents to indicate balance before posting of any transaction. If this balance does not tally with Finance data, it is an indication that there is an error either in Accounts data or the data of Stores. The next logical step in the process shall be the reconciliation of both the records and rectification of error (s) so that on a given day balances in both the records become identical.

7.3. Stock verification/Stock-taking

Stock- taking is the process of verifying stores – record balances of entire range of items with the physical balances.

7.3.1. Reasons for stock-taking

Stock in inventory are as good as cash (Inventories are always treated as part of working capital) and therefore need to be handled very carefully, preserved properly to ensure that there is no deterioration, checked and counted from time to time to determine that there are no variation in physical and book balances.

Following shall be the reasons for stocktaking

- a) To verify the accuracy of stores records i.e. all issues, receipts and stock on hand is accounted. Over a period of time thousands of basic documents are posted in the ledgers/Kardex cards. If the ground balances and book balances of the items are tallied, it shall be an indication that not only all the documents have been posted but also posted in the correct code/folio. No. of discrepancies with reference to total No. of items held in stock, is one of the important attributes in evaluating the performance of Stores. Lesser is the number of discrepancies, better the stores is managed.
- b) To support the value of stock shown in the balance sheet by physical verification. Since inventories represent working capital of the Corporation, it is reflected as assets in balance sheet. The question naturally arises as to correctness of these figures. By carrying the stocktaking and also adjustment for the discrepancies, if any, it can reasonably be established that the figures shown in balance sheet are correct.

- c) To identify slow moving and non- moving items (In absence of computerized accounting system) and considers the need for holding them any more.
- d) To disclose the looseness and lack of storage system or custody and control and rectify such deficiencies to avoid recurrence in future. If for one item if there are different bin locations or items are not available at allotted bin location, or items are lying in a haphazard manner etc reflect on the poor warehousing.
- e) To disclose possible loss of materials. If some of the items, due to lack of proper preservation, have deteriorated beyond the intended use, these are highlighted in stocktaking report when the items are physically checked.
- f) To ensure that discrepancies, if any are properly investigated and accounted for, adjustment vouchers are raised for write off/ write on shortages/excesses so as to bring the book balance at par with ground balance.
- g) To ensure that materials agree with description and specifications as recorded in store-records and Priced Stores Ledger.
- h) To suggest remedial/ preventive measures whenever abnormalities are observed.
- i) To take the stock record balances correctly for purpose of balance sheet. After having investigated the discrepancies and also made adjustment in books of Accounts the resultant value shall be treated as correct stock value.

7.3.2. Reasons for stock discrepancies:

It is very important to know the reasons for discrepancies as (a) it shall help the custodian to be very careful in day to day working to minimize the discrepancies (b) it shall facilitate proper investigations for settlement of discrepancies.

- i) Human error of omission-wrong issue of materials, wrong codification, wrong posting in stock- records etc. When the almost identical items are lying near-by in the bin, possibilities of issue from wrong code cannot be ruled out. Even error in writing the code or posting in the wrong card in Kardex cabinet are common which results in discrepancies.
- ii) Weight differences - when items are received in bulk and issued on piece-meal weight there are bound to be some differences between the stock record balances and ground balances.
- iii) Measurement differences: when measurement of pieced- meal issues is carried by different persons at different time. Theoretically speaking there shall not be any difference on this account but practically some differences are bound to be there.

- iv) Improper stock- taking i.e. the past stocktaking or the current stocktaking has not been carried out properly. Sometime upon rechecking the materials discrepancies are resolved.
- v) Improper documentation may also be one of the reasons for discrepancies in stock.
- vi) Confusion of unit of measurement. This is one of the biggest reasons for the discrepancies in stocktaking. Unit of measurement may be set but issues are made in number of pieces and vice versa.
- vii) Deterioration due to inherent characteristics of items. Because of inherent characteristics of the items some losses have to be there, items like petrol, HSD etc.

7.3.3. Classification of assets:

- i) Fixed assets held by different departments such furniture, Air Conditioners, Refrigerators, PCs, Photocopier Cupboards, Bookshelves etc.
- ii) All kind of stores held by sub-stores of user departments/ Shift Maintenance Stores if any.
- iii) All kind of stores held by Stores department.

7.4. Methods of stock- taking:

7.4.1. Periodical stock- taking:

Whole range of stock shall be verified at the end of a given period i.e. end of financial year normally

- a) This method shall be most suitable for small size Power Station, which hold limited number of items and process can be completed in short period. For bigger power station this method may take many days and also large number of people. The job may also continue for long time and during this period normal Stores operation may suffer.
- b) Stock- taking shall be completed with the help of available manpower without appointing specifically trained stock verifiers.
- c) Stock- taking is done as near as possible to the date of balance sheets and values are more authentic.

7.4.2. Continuous stock –taking:

Under this system stock- taking shall be done continuously through out the year by specially trained and appointed personnel known as stock-verifier/stock-taker. It shall be planned and programmed in such a way that each item is verified at least once in year. A few items are verified on each working day.

- a) No need to close down normal store operations. Issues and receipts are affected only for the particular small group of items being verified.

- b) Normal posting of receipt and issues in stock records shall continue without any interruption.
- c) Stock- taking shall be done by few properly trained people who shall not only independent from store staff but shall also have fairly good knowledge of store items and procedures due to experience gained by them over the period.
- d) Store people shall get sufficient time to investigate the discrepancies, as and when noticed and do proper reconciliation of records and resolve them. Stocktaking may spread over a period of 6-8 months and if not earlier, a discrepancy has to be resolved before close of financial year i.e. 31st March of the year.
- e) Shortages and excesses shall be written-off and written-on on a day- to- day basis. This shall keep the stores records more in line with their actual physical balances and avoids likelihood of major adjustment at the year-end.
- f) Shall help in proper finalization of balance sheets. Since every item is checked once in a year and necessary adjustments are carried out from time to time, value of stock shown in priced stores ledger at the end of financial year can be taken for the purpose of balance sheet without any further checking.

7.4.3. Surprise Stock- taking/ Spot-checks)

Surprise stock- taking of few items may be done any time as deemed fit by a team of at least two senior officers nominated by head of unit.

7.4.4. Stocktaking by Auditors:

Auditors can also do stock- taking when they come for auditing of Accounts records. This has to be limited for few items selected by them. Normally auditors with prior intimation to DE (Stores) visit Stores and at random select some folio/codes/Kardex and advise the custodian to take them to relevant bins so that physical counting can be done in their presence.

7.4.5. Self Stock- taking

This is an informal method of stock- taking. Concerned store- keepers shall do self stock-taking when fresh receipts or issues are there and stock quantities are small and countable. This will help in identifying the discrepancies, if any from time to time and reconciling them by checking stock records. This helps in reducing number of discrepancies when stock- taking is done by other methods.

7.5. Preparation for stock- taking:

7.5.1. Formation of team for stock- taking

- (i) If stock- taking is to be done through periodical method, teams are formed by taking personnel from different departments of the unit. Such personnel are given brief regarding the process, details of various formats to be used and also the time schedule.

- (ii) In continuous method of stock- taking, permanent stock takers shall be appointed on full time basis who continue the stock- taking through out the year in planned way. Such stock-taker/ Stock Verifier shall report to Accounts Department. Stock- taking can also be done by hiring the services of a reputed Charter Accountancy firm whose personnel do the job through out the year. In addition a team of labour force also need to be organized who shall help in counting, weighing or measuring the materials as the case may be. For heavy materials even handling equipment shall be provided.
- (iii) Stock Verification shall be taken up by a team comprising of a technical person of rank of ADE and Accounts person of the rank of AO.

7.5.2. Steps to be taken for continuous method of stock- taking:

- (i) Accounts Department shall draw up a program in consultation with Contracts & Materials Management Department, for whole year in the beginning of financial year so that stock- taking of all the store items is done at least once in a year.
- (ii) Details of the program shall be communicated to stores personnel well in advance so that necessary preparations are made at their end.
- (iii) Reconciliation of Kardex / Bin cards and Price- Stores- Ledger shall done before proceeding for stock- taking. If any variations are found, those are settled and balances of both records are brought into conformity. This process helps to reduce number of discrepancies at the time of stock- taking as errors of balancing, posting etc. are corrected before hand.
- (iv) Stock- taking sheets, sequentially numbered shall be clearly written indicating description, bin location, unit of measurement, code number and group holding stores etc

7.5.3. Preparations immediate before stock- taking:

- (i) Materials are properly stacked in countable position so that there are no delays in re-arranging and counting
- (iii) Advice user departments to lift any materials, which are issued to them but still lying in stores.
- (iv) All pending Stores Receiving Vouchers, Stores Return Notes, Stores Issue Vouchers, Stores Transfer Note etc. are posted in the Kardex Card/ Stores Ledgers.
- (v) Keeping in view method of stock- taking, necessary arrangements for handling equipment and labour force are made.
- (v) Identify location of materials if stored at different places including open yards.

7.6. Process of stock- taking:

- (a) Stock verifier in association with the concerned stockholder shall check up quantities of items by counting, measuring or weighing, depending upon unit of measurement.

- (b) If physical quantities tally with Kardex/ Ledger/ computer master balances, the stock- verifier shall make necessary entries in the Stock- Taking Sheets- prescribed format Appendix 31 (Daily Report on Verification) and also record on the stock records” date-----physically verified and found correct.
- (c) In case physically verified quantity does not tally with stock balance, there exists discrepancy. The stock-verifier shall put up necessary remarks on the stock records i.e. date-----physically verified and -----quantity short/excess.
- (d) The discrepancies so noticed during the day are summarized- stock holding group-wise into a document called ”Stock- taking Discrepancies Report” (Appendix 32) and a copy of which shall be furnished to Heads of Stores and Finance Departments.
- (e) Storekeeper, stock- verifier and head of stores sign all Stock- Taking Sheets and Stock-taking Discrepancies Report.

The stores-head shall arrange to investigate each discrepancy, reconcile the records and submit a report to Head of Finance within a specified time. In case some of the items/quantities are traced out subsequently, re-stock- taking shall be done and discrepancies shall be declared as settled.

7.6.1. Adjustments in book balances:

Each discrepancy shall be thoroughly investigated and after reconciliation if the discrepancy still exists, necessary adjustment shall be made in by writing on/ writing off excess and shortages, so as to ensure that book balances are brought in conformity with physical balances.

Excess materials are taken on charge by preparing certified Stores Receiving Vouchers and shortages are written off by preparing certified Stores Issue Vouchers, with the approval of competent authorities as per delegation of power.

7.6.2. Identification of deficiencies in storage system and deterioration:

The stock- verifier shall also observe the quality of materials and in case any deterioration; the same shall be recorded on the stock- taking sheets. The deficiencies in storage and preservation shall also be recorded and all these details shall be brought to the notice of Head of Stores for corrective action.

7.6.3. Role of Custodian/Stockholder in the stock- taking:

The custodians shall invariably be associated in the process of stock- taking because of their knowledge of stores and where they are kept/stacked. They may be able to identify items very quickly. No discrepancy shall be declared without giving an opportunity to custodian to investigate because:

- a) There may be duplicate location, which the stock- verifier may not be aware but the custodian should know them.

- b) It is expected that a custodian / stockholder has a better knowledge of his stock than any one else and may be able to correct errors of counting, confusion in unit of measurement etc.
- c) It gives him an opportunity to explain and correct the difference, if any, and ensure that he is aware of discrepancies, which may reflect upon performance of his duties. He also signs stock- taking sheets to express his agreement with discrepancies.

7.7. Discrepancies:

When the quantities physically stock- taken/ verified do not tally with stock records. A discrepancy exists. If stock exceed recoded figures, there is discrepancy of surplus and conversely, if the physical stock is less than stock record balance, there is discrepancy of shortage.

7.7.1. Minor discrepancies:

When the items are received in bulk on weight or measurement basis and issued in piece- meal, some small difference are bound to be there, in physical stock and stock card balances. If differences are small and within 0.5% of quantity on stock records or the quantity issued for the period, it is not to be treated as discrepancy and balances shall not be altered. However, write on or write off action shall be taken as soon either stock record or physical balances become nil.

7.7.2. Investigation of discrepancies:

The procedure for investigation may largely depend upon value and nature of discrepancies. Stock discrepancies of high value are more worth- while for detailed investigation than small values.

7.7.3. Process of reconciliation:

- (a) Discrepancies of surplus/excess shall be investigated first as they helps to automatically settle down, many a time, discrepancies of shortages elsewhere.
- (b) Have a physical verification by another senior official.
- (c) Check the stock- records from the date of last verification to ensure that there are no arithmetic errors in posting, omission or duplicate posting of basic stores documents.
- (d) Check that there was no confusion over unit of measurement.
- (e) Check the basic documents viz. SRV/ SIV/ SRN/ STN- in the order of this sequence, or any exceptionally large or apparently unusual transactions.
- (f) Make queries to the custodian concerned to find out if he has any explanation or suspicions regarding discrepant quantities.
- (g) Find out if a discrepancy exists in similar type of materials or other materials near this particular bin. This will help to detect instances of wrong issue.
- (h) Examine the result of last stock- taking to find out any discrepancy at that time.
- (i) Enquiries to be made from user departments to ascertain whether any issue/return have been made beyond normal office hours and without proper documentation.
- (j) Where necessary, review and tighten up physical security measures and documentation procedures.

CHAPTER-8
SCRAP, OBSOLETE AND
SURPLUS ITEMS IDENTIFICAION
AND DISPOSAL

8. Scrap, Obsolete and Surplus items Identification & Disposal:

During the construction and operation phases of various units of the Corporation, large quantities of scrap in the shape of metal turning, worn out components, fabricated off cuts, used oil, containers etc. shall be generated which shall be received by stores of respective units. The quantities are being so large, until timely action is taken for disposal, it shall become extremely difficult to store and control it. Sound financial principles shall also warrant timely disposal so that the scarce funds blocked in inventory of such scrap should be made available for other operational needs. Due changes in technology or design or phasing out of some equipment, many item shall become obsolete. This problem shall further be aggravated during R&M activities in some units. Also due to change in consumption pattern, many items shall become redundant (surplus). Such items are also required to be disposed off in most economical manner to avoid accrual of inventory holding cost. Such type of items, if kept in stores for longer, may create space problem. Some of the scrap such as used oil, cut pieces of cables and conveyor belts are a big fire hazard whereas other cut pieces of steel, tuning and boring scrap are safety hazard.

8.1. Stores items, which need disposal action, arise due to one or combination of following reasons:

- a) Items completed their normal operating life either returned to stores as scrap or lying as such at work site.
- b) Items damaged beyond repair or deteriorated beyond use while in stock.
- c) Items having limited shelf life, which expired while in stock (except medicines)
- d) Items becoming obsolete due to technological changes, phasing out of equipment, replacement by more efficient and modern equipment.
- e) Items becoming redundant/ surplus due to wrong procurement/over procurement.

8.2. Classification of Items needing disposal

Items needing disposal can broadly be classified into following three categories.

8.2.1. Scrap

All items of stores which can no longer be used for the purpose for which they were acquired or for an alternative use within the power station due to wear and tear resulting from extensive use or damaged beyond economical repair shall be termed as scrap. Scrap may arise due to number of reasons like breakage, distortion in the form of condemnation of machinery, turning, boring, empties, packing materials, worn out tools, waste steel (cut pieces below certain pre-determined lengths and width considered usable) are usually classified as scrap. In a power station, major source of scrap arising is worn out components like grinding rolls, bull ring-segments, grinding media forged S. S. balls, pipes (including ash-lines), valves, bearings etc. Some of the scrap items generated in power plants are defined as under:

(i) Steel Scrap:

Structural Steel: cut pieces less than 2 meters length. Reinforcement steel: cut pieces less than 3 meters length. Plate- cut pieces having total area less than 1 Sq. meter, width of 0.5 meter. Cut pieces beyond above dimension shall also be treated as scrap if having been twisted, bend, damaged in process of fabrication or laminated.

(iii) **Pipes:** All cut pieces of various pipes less than 1-meter length shall be treated as scrap. Pipes of longer than this but twisted or bent beyond rectification or replaced pipes shall also be treated as scrap.

(iv) **Cable Scrap:** Copper cables less than 5 meters length. Aluminum cables- less than 10 meters length. Longer pieces if they are replaced due to ruptured or damaged shall also be treated as scrap.

(v) **Conveyor belts** pieces less than 3 meters. If replaced due to damages at various places even more than 3 meters length shall be treated as scrap.

8.2.2. Obsolete items

These are partially used and not damaged (reusable) or unused items, spares or equipment which have economical worth but are no longer useful to the Corporation owing to many reasons such as change in process or materials, as well phasing out of equipment. Items also become obsolete due to standardization efforts. Spares are more prone to obsolescence than other materials such as consumable or raw materials. In power stations impact of obsolescence shall further be high due to R&M activities

8.2.3. Surplus/ Redundant items:

Surplus items are not obsolete. When the quantity of an item in stock is more than the reasonably necessary to provide adequate and effective services to user departments, the excesses over normal holding is said to be surplus or redundant. Items may become surplus due to improper inventory control, unpredicted changes in consumption pattern due to rationalization, standardization, modification or replacement of some equipment, development of alternate and/or cheaper materials and sometime due to faulty warehousing and existence of duplicate codes/folios. In power stations, another reason for surplus may be return of construction/erection excess materials

8.3. Authority for declaring items as scrap, surplus and obsolete for disposal action:**8.3.1. Salvage Committee:**

Salvage Committee shall be responsible for identification of scrap, obsolete and surplus materials and advise utilization/ disposal in the most economical manner.

8.3.2. Objectives of the Committee:

The basic objectives of this Committee are to inspect scrap, inactive, surplus and obsolete items, determine their classification and quantities and mode of disposal to best advantage of organization as these items are the assets of the Corporation having substantial economic value

8.3.3. Composition of Salvage Committee

At each power station, there shall be standing Salvage Committee. The Committee shall be comprising of representative from O&M/ User, Finance and Materials Departments and co-opt member from any other department for special categories of items. Nominations for the Committee shall be made by the respective Heads and constitution approved by the Chief Engineer/ Head of Unit. Divisional Engineer (Stores)/ Head of Stores shall be the convener of the Committee. The convener shall be responsible for coordination and convening of the Committee's meeting, preparation of agenda, circulating the documents relating to the disposal of materials, preparation of Committee's recommendations, obtaining financial concurrence and approval of competent authorities as per Delegation of Power.

8.3.4. Functions of Committee:

- (a) Identification of items and classification into scrap, surplus and obsolete categories.
- (b) To recommend possible utilization of surplus materials within the power station or within the Corporation for on-going works/future works. A copy of Salvage Committee's recommendations in this regard shall be sent to Corporate Materials Management Department.
- (c) Decide whether worn out spares, assemblies are repairable and if so, the extent and mode of repair and estimated cost. If the items are repairable and cost of repair is very high and incommensurate with value of items, Committee shall recommend them to be classified as scrap.

Such decisions shall however be taken keeping in view the following aspects:

- Cost of reconditioned versus cost of procurement/making new item.
 - Life expectancy from reconditioned component versus replaced new item.
 - Manpower cost associated in repairing defective items.
 - Availability of spares in case of repair of assembly/sub-assembly
 - Degree of precision, quality and reliability
 - Infrastructures facilities, like shop equipment, level of skill of operatives etc.
 - Safety
- d) Recommending mode of disposal i.e. auction, tendering or sale to employees etc.

- e) Fixing reserve prices of items recommended for disposal keeping in view following factors
- Rates of scrap metal appearing in Trade Journals
 - Scrape sale schedule prepared and circulated by the Corporation
 - Condition of materials to be disposed off.
 - Local condition of unit disposing off scrap including geographical location
- f) The Committee shall also examine the materials including packing materials have no worthwhile economical value and recommend disposal action like destroying/ disposing them as debris/garbage. .
- g) To act as a referee in case of dispute connected with classification of any item as scrap, obsolete, surplus or repairable.
- h) To review the earlier recommendations including reserve price in view of feedback furnished by Purchase Section after tender notification and evaluation of bids.

8.3.5. Frequency of meeting of the Committee:

The meeting of Committee shall take place as frequently as possible or at least quarterly so as to ensure prompt disposal of scrap which shall keep the plant and scrap yard clean and also make available funds to the organization otherwise tied up in scrap materials. Any delay in disposal may further risk deterioration and loss of sale value apart from incurring inventory- carrying cost.

8.3.6. Approval of recommendations of Committee:

Recommendations of the Committee need to be approved by competent authorities as per the Delegation of Power.

8.3.7. Working out of details for submission to the Committee:

Stores shall work out the following details for the consideration of Salvage Committee:

Scrap items: Various lots, which are ready for disposal, furnishing details such as lot No., description of materials and quantity of each lot.

Inactive items: Using the Movement Analysis, details of inactive items shall be worked out to further analyze them for identification of surplus and obsolete items.

Defective and worn out major spares, assemblies/ sub-assemblies and equipment: Here again details regarding lot No., description of materials and approx. quantity shall be worked out.

8.4. Return of scrap to stores by user departments:

- a) At the point of generation of scrap, user departments are to ensure that those are accumulated type and metal grade-wise. For instance in the workshop scrap of various metals i.e. stainless steel., carbon steel, alloy steel, mild steel, copper, brass, bronze aluminum etc. may be generated. If all the above types of scrap are kept separately, it increases scrap value. If the scrap of various grades and types of metal are mixed, it has been experienced that selling price of such mixed scrap may be less than that of selling price of the most inexpensive metal in a mixture. This is because the buyer of such scrap will have to segregate it at extra cost. To simplify this sorting out, metal drums shall be kept at workshop, duly marked with type and grade of metal. Such scrap in sorted out lots can be returned to stores. Similarly worn out spares can also be segregated in different lots.
- b) Scrap shall be returned to stores through Stores Return Note which shall have a separate control series Accounting unit shall normally be in weight but it can be number for certain special items as tyres, batteries, empty containers etc.
- c) Custodian of scrap-yard shall receive the scrap and shall ensure proper accounting of receipts and issues. Separate ledger/ Kardex cards shall be maintained for each category duly codified for the purpose of computerized accounting.
- e) In order to monitor holding of inventory of scrap materials these should be codified in Main Group '00' of codification scheme (broken down to Sub-groups and sub-sub groups). For the purpose of most economical disposal, scrap shall be categorized as ferrous and non-ferrous cutting and boring; structural/reinforcement steel cut pieces; pipe cut pieces, cable cut pieces; conveyor belt cut pieces; empty container made of both metal and plastic; components including tyres, batteries, bearings, grinding media; condemned equipment and vehicle, scrap wood, used oil etc.
- f) Certain components like bearing, spark plugs shall be defaced/broken before disposal so that they do not come back to market as new one after reconditioning.
- g) Scrap having substantial economic value and ready market shall be stored under safe custody in the scrap yard (properly fenced and having lockable gate.
- h) For pricing of Stores Return Note, Scrap Rate Schedule shall be developed which shall be updated from time to time.

8.5. Storage of Scrap

- (i) Mild steel scrap shall be stored separately in three categories i.e. scrap of reinforcement steel, scrap of structural steel and Misc. steel scrap of loops binding wire etc. Scrap of aluminum metal shall be stored separately as it has very high value of return. Similarly scrap of copper cable/ conductor and aluminum cable/ conductor shall be stored separately. Turning, boring/ chips of

various metal arising from the workshops shall be stored in drums, type of metal/grade-wise to fetch better value. Other lots can be formed of worn out batteries, tyres, rubber spares, electrical spares, auto spares, bearing etc. To ensure proper custody and accountal of scrap materials a separate area shall be earmarked for scrap yard with sufficient space for storing category-wise. The area is to be divided into separate parts to ensure that once the existing lots are under disposal action, the fresh arrivals are stored in the other part.

8.6. Formation of lots of scrap:

- a) When sufficiently disposable quantities are accumulated in each lot, those shall be offered to Salvage Committee for inspection and review.
- b) As soon as inspection is done and disposal action processed, new arrivals shall be kept at a separate place to form new lots to avoid complications in disposal.
- c) Lots should not be too big or too small. If lots are too small, it shall increase disposal work and quite large number of small scrap dealer may participate and in case lots are too big, the response may be very poor as Earnest Money/ Security amount shall be substantial.
- d) A lot Register shall be maintained, which shall contain all the information regarding a lot.
- e) Lots so formed shall be allotted numbers and play-cards shall be placed before each lot, indicating Lot No., description of materials and quantity.

8.7. Duties of custodian of scrap yard:

- a) To ensure that all scrap arising received are properly located and handled after documentation. Proper stock records of such materials are maintained.
- b) To retain and salvage maximum amount of materials out of scrap for economical reuse.
- c) To prepare and submit, quarterly or earlier, a list giving details of different lots, to Salvage Committee for their consideration.
- d) To arrange repair or reconditioning of items as recommended by Salvage Committee.
- e) To ensure proper accounting of materials issued for departmental use or sale to prospective buyer against Sale and/or Delivery Orders.
- f) To keep record and implementation of recommendation of Salvage Committee.
- g) To be associated with handing over of scrap to prospective buyers against Sale and/or Delivery orders.
- g) Arrange to furnish to the appropriate authorities details including rates of scrap disposed off on quarterly basis so as to enable them compile data for circulation to all units.

8.8. Disposals of surplus obsolete and scrap materials:

Purchase Department of the Corporation shall handle disposal action. This assignment shall be given to them because of their knowledge of market, price trend and probable user of

such items. Purchaser's contact with salesmen of other companies is one of sources of his information as to possible users of materials. Purchaser of spares can also tie up procurement decisions with purchase of scrapped component by the prospective supplier who uses them as raw materials and offer the best price. In practice, it is observed that we can get the best price by selling the scrap directly to the end users, rather than to middlemen who normally form a cartel of their own. Spares may be manufactured from special alloys and scrap dealer may not understand their composition. However, manufacturers of spares know the value of such scraps (For details procedure on disposal please refer Chapter on Disposal of Scrap, Obsolete and Surplus Materials of Purchase Management System Manual)

8.8.1. Disposal of surplus and obsolete materials:

The following are some of the methods to utilize/dispose of surplus and obsolete materials:

- (i) Use within the unit shall be considered by consulting all the user departments- some of the items may be used as substitute to some other materials, as it is or with some economical modifications.
- (ii) Circulate details to other units of the organization to facilitate inter unit transfers. While circulating the details of spares, it shall be ensured that full specifications, part No, if any; name of manufacturer and model of equipment are furnished. This shall help other units to work out their requirements. It is experienced that if full details of materials are not available other units of the organization do not respond favourably.
- (iii) If buy-back clause is operative with Original Equipment Manufacturer, surplus and obsolete materials shall be returned to them in exchange of certain fast moving and immediately required spares.
- (iv) If other units of the organization also do not need these materials, there is no way but to retain surplus materials for future consumption, as right price may not be obtained by disposing them to outside agencies. As for obsolete materials are concerned, the details shall be circulated to other power utilities (generating units)
- (v) Original equipment manufacturer may be consulted for disposal of obsolete spares. They may furnish vital information as to who are the other customers using such equipments so that they may be approached. Sometime original equipment manufacturer or supplier may take back obsolete materials to meet outstanding orders of other customers.
- (vi) If nothing works out, as above, obsolete materials shall be disposed off along with scrap materials, as retaining them any further will just keep on incurring heavy inventory holding cost. Before disposing such materials as scrap, possibilities of cannibalization may also be explored as this also helps to take out optimum value from such materials.

- (vii) **Before disposing off obsolete materials as scrap, financial sanction is need to be obtained to write off their value, which may be huge as compared to scrap value.** It shall there be advisable sale of obsolete materials as scrap shall be resorted as last stem and details of action taken at sl. (i) to (vi) shall be enumerated in the note submitted for approval of management. This shall facilitate faster decision making process.

8.8.2. Methods of disposal of Scrap:

Purchase Section after receipt of complete details of obsolete/ scrap materials alongwith duly approved recommendations of salvage Committee shall proceed further and initiate disposal action as under (selecting the mode as recommended by the Salvage Committee and approved by the competent authority)

- (a) Sale by Auction, (b) Sale by tendering (limited or open press tender) &
(c) Sale to employees

8.9. Inspection of scrap by prospective bidders:

Since the scrap is sold on 'as is where is basis', opportunity need to be provided to prospective bidder to inspect the scrap materials before submitting the bids to satisfy themselves on all points with regard to quantity, quality, nature, conditions and other details. In view of this, they are allowed by Head of Stores, to inspect the materials as per provision of clause 4 -17 Instruction to bidder for sale of scrap (Chapter 15 Purchase Management System Manual).

8.10. Handing over of the scrap and obsolete items to Purchaser:

- a) Purchaser's authorized representative shall approach DE (Stores)/ Head of Stores
Alongwith Sale Order and Delivery Order, issued by Purchase Section or Corporate Office, for lifting the scrap.
- b) Purchaser's authorized representative shall complete all the requisite formalities for entry of manpower and trucks for the purpose of removal and transportation of scrap materials.
- c) The handing over of scrap shall be supervised/witnessed by a committee comprising of representative from Security, User Department and Stores Section whose nomination shall be approved by the respective HOD.
- d) The committee members shall witness tare weight and gross weight of the truck.

- e) The committee members shall ensure that loading is done only from the assigned lot and strictly as per the specifications and quantity contained in the delivery order. No picking and choosing or sorting shall be allowed to the Purchaser. Scrap is to be handed over on 'as is where is basis'

Following items shall not be allowed to be lifted alongwith mixed scrap:

- (i) Aluminum cut pieces, GI cut piece of any shape and size.
 - (ii) Cable and materials of Brass and copper.
 - (iii) Straight pieces of reinforcement steel 3 meters and above and structural steel measuring 2 meters and above.
 - (iv) Plate cut pieces having total area more than 1 Sq. meter and width of 0.5 meters and above
 - (v) Chequered plate of size 1 sq. meter and above.
 - (vi) Worn- out components such as Bull- ring segment, separator body liners and any rail piece.
 - (vii) Items at Sl.No. iii), iv) and v) of above may be allowed to be lifted is found twisted bent and/or welded.
- f) The person authorized by the Purchaser to take delivery, sign the exit gate passes or other relevant documents must carry with him a Power of Attorney/ Letter of Authority to represent him.
- g) After loading the materials and weighment, an exit gate pass shall be prepared by the stores representative indicating Description of materials, gross and tier weight and quantity loaded, truck number, Purchaser's name and address, Sale Order and Delivery Order No. & Date, place to which the materials being taken. All the member of the committee shall sign on the gate pass for having witnessed loading, Purchaser's representative shall sign in the relevant column, Acknowledging receipt of materials and competent authority shall approve exit gate pass
- h) Stores representative shall prepare Stores Issue Voucher and obtained Purchaser's signature in the column 'received by'. All the committee members shall also sign the SIV in token of having witnessed loading and weighment.
- i) SIV shall be posed in stock records and distributed (including copy to Purchaser's representative).
- j) An invoice shall be prepared indicating the basis value of materials plus sales tax (details whether CST or State Sales tax and rate including submission of relevant form for concessional sales tax).
- k) Committee members shall ensure that General Condition of Sale of Scrap, Sale order and Delivery Order are strictly followed.

CHAPTER-9
EVALUATION OF STORES
MANAGEMENT FUNCTIONS

9. Evaluation of Stores & Inventory Management Functions

The overall effectiveness of stores management functions can be determined through as to how efficiently various components like store-keeping and inventory control are performing. Management reporting enables to analyze, evaluate and take decisions or remedies like improvement in the method of working, amendment to the existing policies procedures and staffing etc. It is, therefore, very important that management at different levels shall be apprised at certain frequencies, of the level of overall performance. With the added help of computer based Stores Accounting and Inventory Management; it is possible to achieve much higher level of performance.

9.1. Goal for Efficiency of Stores Management

Before the question of stores efficiency can be addressed, we need to consider the question of 'efficiency from whose point of view'. The following are some of the goals for efficiency of stores management, which shall help to illustrate the point.

9.1.1. Financial Consideration

- a) Minimize the working capital tied up in stock by keeping the range of materials and stock level at optimum
- b) To keep down stores' operating cost including expenditure on manpower, storage accommodation and over-head.
- c) Minimize obsolescence and avoid deterioration losses.
- d) Maintain rapid turnover of stock.
- e) Employ efficient and cost effective mechanical handling equipment and ensure their optimum utilization.
- g) Prompt identification of obsolete, surplus and scrap materials and most economical disposal.

9.1.2. Warehousing Consideration

- a) Optimum utilization of storage space.
- b) Keep down handling to a minimum
- c) Proper Storage and preservation of stocks
- d) Ensure stock rotation and issues on 'first in first out' basis.
- e) Proper security of goods
- f) Proper safety measures to avoid accidents.
- g) Optimum staffing of personnel and training and development.
- h) Systematic storage of stores records to facilitate prompt retrieval.

9.1.3. Service Considerations

- a) Avoid stock-outs especially of critical materials.
- b) Respond promptly to request/emergency situations
- c) Ensure goods issued are in good conditions.
- d) Issues are made to users without undue formalities.
- e) Respond immediately to changing requirements
- f) Locate materials as near to the point of usage especially heavy and bulk.

The above list of goals may not be complete and may include some other attributes but the above list shall support the views that the performance of stores function shall be considered differently by the different functions of the Corporation

9.2. The Measurement of Stores Management Efficiency:

There are many approaches to, and system for, the measurement of efficiency of stores management. Most of these involve the analysis of records of activities over a period of time, and the application of some kind of formula or ratio analysis, designed to highlight any changes in efficiency.

9.2.1. The following are some of the commonly used parameters for evaluating the efficiency/performance of Stores Management:

- a) Annual operating cost of stores management functions
- b) Value of damage, loss or deterioration of goods in stock.
- c) No of items requiring identification.
- d) Number of issues made during the year.
- e) Number of receipt during the year
- f) Number of discrepancies noticed in stock- taking during the year.
- g) Number of discrepancies of stock- taking investigated and reconciled during the year and number of discrepancies pending for reconciliation and investigation.
- h) Number and value of rejected goods from suppliers lying with receiving section.
- i) Amount of suppliers' advances pending for want of receiving documentation (Collection of consignments from the carrier, Inspection, preparation of SRVs and settlement of discrepancies).
- j) No./ value of claims settled on carrier/underwriters and No./value of insurance claims lodged in a year.
- k) Amount of demurrage/ wharfage charges paid during the year as percentage of total freight charges.
- l) Value of scrap and obsolete goods disposed off during the year and value of such goods pending at the year- end.

- m) Ratio of number of stores employee v/s number of active items in stores or ratio of number of employee v/s value of stock at year- end.

After having worked out the parameters for evaluation of stores management a comparison of current position can be done for last few years and follow up action can be taken for some of criteria if deterioration is noticed. However, data so collected, clearly indicate the current performance of this function.

9.3. Some of the important parameters/criteria for measurement of performance of stores management are as under:

9.3.1. Value of Damages, Loss or Deterioration of Goods in Stock:

This is an important criterion to evaluate the efficiency of warehousing. In order to avoid/minimize losses, damages or deterioration, stores has to ensure that:

- Goods are rotated properly by ensuring issues on 'first in first out' basis
- Goods are properly stored and protected from atmospheric hazards, applying proper preservatives for goods to be stored for longer period (Items like insurance spares)

A subjective assessment of performance on these criteria can be made by visit to stores from time to time. However, for the purpose of objective assessment a system of write off, of such losses has to be in place. At the end of the year total value of such write of can be worked out. Loss of goods during storage fall under category of avoidable losses (apart from some losses due to inherent characteristics of goods like evaporation losses of HSD/petrol), such losses as such indicate lack of proper storage and preservation, handling and issue system.

9.3.2. Settlement of claims on underwriter/carrier is another important function of Stores.

Value of claims pending at the year end _____ X 100

- a) Value of claim lodged during the year (pending on the Beginning of Year + claims lodged during the year

b) No. of claims pending at the year end _____ X 100

No. of claims lodged (pending on beginning of year
+ Claims lodged during the year)

Lower the percentage speaks of higher efficiency

9.3.3. Payment of demurrage/wharfage charges (avoidable expenditure) also reflects on the efficiency of Clearance and Despatch Group of Stores functions.

Amount of Demurrage Wharfage charges paid in a year _____ X 100

Total Freight charges paid in a year

Lower percentage speaks of higher efficiency.

9.3.4. Number and type of discrepancies noticed during the stock-taking and investigation/ reconciliation.

The number and type of discrepancies (Minor or major) noticed during stock-taking is another important criteria to assess performance of stores management.

The following are some of the reasons for stock discrepancies:

- a) Human error of omission – wrong issue of materials, wrong codification, wrongs posting in stock- records.
- b) Improper documentation.
- c) Confusion of unit of measurement.
- d) Wrong stock- taking.
- e) Deterioration due to inherent characteristics of items.
- f) Weight differences- when items are received in bulk and issued on piece-meal weighing.
- g) Measurement difference- when different persons carry out measurement of piece- meal issues.

Whereas some small /minor discrepancies are bound to arise due to reasons e), f) and g), any discrepancy due to a), b), c) and d) reflects the efficiency of store- keeping and documentation.

The investigation and reconciliation of discrepancies is yet another criteria to assess/evaluate efficiency of stores management functions. If the discrepancies are reconciled promptly, it indicates efficiency of stores but in case those keep cropping up, it reflects poor working.

The following may be the two ratios to evaluate performance of stores on the criteria of stock-taking:

$$\text{a) } \frac{\text{No. of discrepancies during the year}}{\text{No. of items stock taken}} \times 100$$

$$\text{b) } \frac{\text{No. of discrepancies resolved during the year}}{\text{Total No. of discrepancies (Pending on beginning of year and noticed during the year)}} \times 100$$

Higher percentage of a) and lower percentage of b) reflects poor stores management.

9.3.5. Disposal of Scrap and Obsolete Materials:

This is another important stores management function, although at times, a neglected area having potential to generate funds by most economical disposal of scrap and obsolete materials, apart from keeping work area and stores cleaned.

For the evaluation of stores functions on this attribute, we may work out the value of scrap and obsolete materials disposed off during the year and value of such goods lying for disposal, is greater than the holding, it reflect efficient working of stores in this aspect.

Approximate value of scrap and obsolete materials at the year- end

Value of scrap and obsolete materials disposed off during the year

CHAPTER - 10
PRICING

10 Pricing

Pricing is necessary due to the following

- To indicate value of stores in stock.
- To provide basis for materials costing
- To provide the means of operating stock control by value.

10.1 Determination of basic purchase price:

Prices may be quoted by suppliers in various ways i.e. net price, or price list prices, subject to discounts, may be inclusive or exclusive of freight charges, taxes, duties, discounts, packing and forwarding, insurance etc. For costing purpose we must arrive at a figure, which will represent the cost actually up to the point of delivery of goods at buyer's premises. This is done by taking supplier price as base price, deducting trade or quantity discounts and adding any other expenditure not already included.

Supplier's list price	Minus	Add
	Trade discount	Packing and forwarding,
	Quantity discount	excise duty, sales tax,
		insurance, freight custom duty

- Cash discount against payment within a agreed limited period of time of immediately is treated as financial transaction and is normally ignored when calculating purchase price.
- The charges added to purchase price may be actual or may be percentage pre-determined.

10.2 Method of Pricing Materials Issues:

The purchase price determined as above, forms basis to be used for costing of issues and valuation of inventory. The following are some of the methods of pricing.

Cost Price

(a) First in First Out (FIFO)

Advantages

- Based on actual cost and no profit or loss arises.
- Balance stock values represent fairly current value for the purpose of Balance Sheet.

Disadvantages

- Calculation of issues are very cumbersome and sometimes for one issue, there are different rates for various quantities.
- Cost comparison of two consecutive jobs different due to different issues rates.
- At the time of rising prices, the charge to production is under price as cost of replacing materials is high.

(b) Last in First Out (LIFO)

This is the price for materials last taken into stock. Actual issues are, however, made on sound storage system of 'first in first out' but only pricing is on LIFO system

- Production is charged more recent price.
- No profit, no loss in material costing will occur.
- At the time of rising prices there is no wind-fall profit as would have been FIFO.

Disadvantages:

- Like LIFO it involves tedious clerical work in pricing.
- Stock values relate to the prices of old lots on hand and may be completely out of current replacement prices.
- Under this method during falling prices substantial write off may be necessary to reduce the value of stock to indicate current valuation in balance sheets. If this is not done, balance sheet will show false value.

(c) Average Pricing

Simple Average:

This is average of price unit paid at different receipts. Under this system of average price profits or loss may arise in pricing issues i.e. some times stock will be there but no value or the value in book may be there but no stock physically available.

(d) Weighted Average

This is the most commonly used method of pricing and is arrived at by dividing the total value of stock at a given time by total quantity. It is necessary only when fresh stocks are received.

(e) Market Price

Issues are priced on current market price irrespective of cost of initial procurement.

This is sometimes referred to as replacement price.

Advantages

Keep the cost of product in line with current market price.

Disadvantages

During the period of rising prices, the stock balances may be very much under rated and on the contrary during period of falling prices stock remaining is seriously over-valued and large sums have to be written off to a realistic value in balance sheets.

(f) Standard Price

A standard price is a pre-determined fixed price, determined on the basis of up-to-date knowledge of price and prevailing conditions. Standard price is fixed for a period of time irrespective of actual price paid for the materials. At the end of period standard is reviewed and if necessary changed and again put into operation for further fixed period.

Advantages of Standard Price

- Clerically it is easier than any other method.
- Receipts and issues are valued on the same standard price and there is no need to show value of each transaction on stock records, value of stock hand can be valued at any time by multiplying the quantitative balanced with standard price.
- By eliminating variation in cost due to price changes, it gives a better indication of efficiency in the use of materials.
- It avoids any delay in obtaining a price and therefore speed up record posting and costing operations.

The only difficulty in this system is to determine a workable standard price and at the time of rising prices stocks are under-valued and at the time of falling prices, over-valued.

Differences in standard price and actual price are debited and credited to variance account, which may be favourable or unfavourable. At the year end balance appearing in variance account is charge or credited / debited to profit and loss account.

The system is workable only if the market conditions are fairly stable. If there are rapid fluctuations, system will become quite difficult, needing re-fixing of standard very frequently.

10.3 There may be any suitable method of pricing in an organisation, facts remain that at the end of accounting year, total value of stocks are taken to balance sheet to represent assets of an organisation. The following are some of the adjustments, which are carried out to make figures more realistic:

- Price
- Obsolescence
- Deterioration

A suitable percentage is determined for above adjustment.

APGENCO adopts Weighted Average Method of Pricing.

CHAPTER - 11

Theft of Materials

11 Theft of Materials

Instructions for the actions to be taken

Instructions were issued time to time by the Erstwhile APSE Board regarding duties and responsibilities in the event of theft of departmental material. These instructions are being followed at present in APGENCO. The updated and revised instructions after considering various issues with regard to actions to be taken in case of theft of materials are as follows.

1. Immediately after an incident of theft comes to the notice of the physical custodian of the material (AE/AAE), the same should be informed immediately to his superior officer upto the cadre of DE as well as to the officer in charge of Security of the plant. A complaint should be lodged with the jurisdictional Police Station by the physical custodian of the stolen material. The acknowledgement of the Station House Officer regarding complaint of theft should invariably be taken. The head of Security in the Generating station i.e., in-house Security or SPF officers shall act in liaison with the local Police and superior Police officer of the jurisdiction and ensure that the crime is registered immediately and proper legal action is initiated as per law. He shall render all legal assistance to the local Police in completion of the investigation. He shall conduct preliminary investigation of subversive activities/sabotage/theft promptly and report to the Chief of Vigilance & Security at the Corporate Office.
2. The officer in the rank of ADE shall submit Preliminary Investigation Report (PIR) within 24 hours of occurrence of theft below Rs.5,000/- in value in the prescribed proforma containing 11 columns (Annexure-I) to DE, SE & CE. In case of theft cases exceeding Rs.5,000/- in value, PIR shall be submitted within 24 hours to DE, SE, CE, General Manager/General, Chief of Vigilance & Security and concerned Director. However, in case of theft of material exceeding Rs.25,000/- additional intimation should be sent immediately by Fax/Carrier message/Telegram to Chief of Vigilance & Security and concerned Director. The Preliminary Investigation Report (PIR) has to be submitted by ADE and it is not correct on part of the ADE to countersign and forward the report submitted by the physical custodian. The PIR shall be submitted by next higher officer of the physical custodian.
3. The local Police are bound to take cognizance of all cognizable offences by issuing FIR, whenever any complaint is lodged and to investigate as per Section 154 Cr. P.C. A copy of the FIR shall be furnished to the complainant free of cost. The head of Security in the Generating station shall be aware of this legal provision and ensure that proper and spontaneous legal action is initiated.

4. In case the local Police refuses to receive the information from any informant or refuses to initiate legal action by registering FIR, then the same complaint/ information can be sent to Superintendent of Police concerned, who if satisfied that such information discloses the commission of a cognizable offence, shall either investigate the case himself or direct an investigation to be made by any Police officer subordinate to him as per Section 154 (3) Cr. P.C.
5. The head of Security of the Generating station shall report such non-cooperation/refusal of local Police to the Chief of Security without any delay so as to take up the matter, with higher officers in the Police Department.
6. Section 200 Cr. P.C is very clear about preferring complaints directly before the concerned Hon'ble Magistrate when local police refuses to take cognizance of crime. The concerned head of Security may take steps to ensure investigation of crime, in consultation with the Head of plant and Chief of Security.
7. The crime number and section of law should be noted in the preliminary investigation report itself as far as possible. A copy of complaint to police should invariably be enclosed with preliminary investigation report.
8. Non-receipt or delayed receipt of PIR shall be viewed very seriously by the Corporation and necessary departmental action would be initiated against the concerned for such lapse.
9. After lodging a complaint with the police, it is the duty of ADE/AEE, DE/EE & SE to conduct a Detailed Investigation and send a Detailed Investigation Report (DIR) within a week at the latest after the occurrence of the theft in the prescribed proforma containing 12 columns (Annexure-II) to concerned officers. The monetary limits for submission of Detailed Investigation Report are as under.

a) ADE/AEE	... upto	Rs. 5,000/-
b) DE/EE	... upto	Rs.25,000/-
c) SE	... above	Rs.25,000/-
10. If Crime Number and section of law is not mentioned in PIR, it must be mentioned in DIR without fail.
11. If Detailed Investigation Report is not received from the concerned officers who are responsible to send it, he shall be squarely held responsible and suitable action initiated. If the DIR reports are not received from the officers within a week the officers in charge of sub-division/ division/ circle will be personally held responsible for the lapses and in such a case the report should be completed by the next higher officer endorsing his special remarks in the report duly indicating the name and designation of the officer who failed to submit the report.

12. The Preliminary Investigation Report and Detailed Investigation Report should not be sent in a routine manner. All columns should be filled, findings should be specific and action proposed to be taken against Corporation staff should be clearly mentioned along with the precautionary measures taken to prevent recurrence of such cases. Remarks column in Preliminary Investigation Report should incorporate location of theft, description of material, value of the material and whether alternative material is available in lieu of stolen part etc.
13. Involvement of Corporation staff in theft cases should be viewed very seriously and the staff involved should immediately be suspended by the competent authority. The officer submitting Detailed Investigation Report should strive to find out whether the offence is direct act of corporate staff or with connivance of the corporate staff or a case of professional theft.
14. The Corporation officers should not satisfy with merely reporting the occurrence of theft to the police. Greater personal contacts should be maintained at all levels with the police authorities. Security Officer, Senior Officers and Head of Power station should have regular liaison meetings with Senior Police Officers and ensure that progress of all pending cases are reviewed during monthly crime meeting of the Superintendents of Police. Concerned Security Officer/ Assistant Security Officer be deputed for this purpose and he should be asked to submit a report regarding progress of investigation of all cases.
15. All the cases of theft of materials shall be reviewed in the monthly Co-ordination meeting presided by the Head of the station and a consolidated monthly return in enclosed proforma (Annexure-III) should be sent to the General Manager/ General and Chief of Vigilance & Security, Vidyut Soudha by 5th day of succeeding month. All the monthly returns received from the stations should be consolidated, reviewed and circulated to Directors & CMD by 10th of the succeeding month by General Manager/General. The General Manager/General shall highlight all theft issues in the Management Committee Meeting.
16. After registering case and submission of PIR & DIR, the progress in investigation shall be regularly monitored by the Security and Engineering wings. The police personnel shall be pursued regularly and necessary help from corporation side be extended with a view to recover the material lost. Even after putting all efforts, if the material is not traced, certificate to that extent is to be obtained from police.

17. If the material is not traced out, the material has to be written off by sanctioning survey report by the competent authority. Before sanctioning survey reports, the sanctioning authority shall verify the following aspects and satisfy himself in all respects.
- a. Whether police complaint is lodged immediately after noticing of theft and case is registered or not.
 - b. Whether PIR is submitted within 24 hours or not.
 - c. Whether DIR is submitted within one week or not.
 - d. Whether police officials have done proper investigation to trace out the stolen material or not.
 - e. Whether our Staff and Security officials (in-house/SPF) have extended necessary co-operation to the police during investigation.
 - f. Whether any of our staff or either directly or indirectly responsible for loss of material.
 - g. Whether all precautionary measures to safeguard the materials are taken or not.
18. Survey Reports to be sanctioned at Corporate Office shall be furnished to the General Manager/General. The General Manager/General along with Chief of Vigilance & Security shall review the proposal first in respect of all the items stated in item 17. Once General Manager/General and Chief of Vigilance & Security are satisfied with the proposal in all angles, the same may be put up for circulation to the concerned Director, Director (Finance) and Chairman & MD.

ANNEXURE-I**PRELIMINARY INVESTIGATION REPORT OF THEFT CASE**

1. Name & Designation of Reporting Officer :
2. Date and time of occurrence of theft :
3. Place of theft :
4. Nature and value of property stolen :
5. Date of complaint to Police & Crime No. of case registered by Police with Section of Law :
6. Name of Police Station, where complaint is lodged; (Mandal & District) under which it falls :
7. Details of how the theft occurred :
8. Findings of the reporting/ investigation officer :
9. Action proposed to be taken against the departmental staff if they are found to be responsible for loss :
10. Precautionary measures to safeguard the departmental property from recurrence of such cases :
11. Remarks :

ANNEXURE-II**DETAILED INVESTIGATION REPORT**

1. Name & Designation of the Investigating Officer
2. Date of theft
3. Place of theft
4. Crime No. Section of Law and Police Station where case is registered
5. Date of Investigation
6. Value of materials involved in the theft
7. Name & Designation of the departmental/local persons whom has contacted
8. Detailed report of the case
9. Finding of the Investigating Officer
10. Action proposed to be taken against the departmental staff if they are found to be responsible for loss
11. Precautionary measures to safeguard the departmental property from recurrence of such cases
12. Remarks

