# PLAN FOR PREPARING QUARTERLY ESTIMATES OF THE REQUIREMENTS OF MATERIALS AND SUPPLIES

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#### 1. GENERAL

1.01 Since 1929 the Telephone Companies have been furnishing a quarterly estimate of their requirements and returns of certain selected categories of supplies for each of the Western Electric Company Distributing Houses. These

Telephone Company estimates include both new and Class "C" materials which they estimate will be ordered through the Distributing Houses. After making allowances for the shop production of repaired materials and their local stocks of repaired Class "C" and new materials, the Distributing Houses, with the advice of the Telephone Companies, prepare and forward their estimated net requirements of new materials for the succeeding two quarters to the Western Electric Company Program Planning Organization at New York. This information is used for scheduling factory production and purchases from outside suppliers.

- 1.02 From time to time certain of the estimating procedures have been revised and simplified to meet changed operating and supply conditions. The first postwar revision, issued with P.O.L. 1189 on February 1, 1950 in the form of Supply Operating Practice, Section 21.101, Issue 1, charged the supply organization with the fundamental responsibility for coordinating and summarizing estimates of requirements.
- 1.03 This revision of the Plan incorporates changes which are designed to produce more accurate and realistic forecasts of supplies requirements, the need for which has become urgent as a result of the effects of merchandising, generally higher business levels and increasing diversity of service offerings. Briefly the major changes incorporated herein are as follows:
  - (a) Establishes regular authoritative channels for a single authentic quarterly statement of requirements for specific items of new materials and supplies.
  - (b) Adds to the regular quarterly Distributing House adjusted views of requirements for the current and next succeeding quarter official Telephone Company views of net new requirements for Station, Booth and P.B.X. items for the current and next succeeding year. Long-

term requirements for exchange, toll and quadded cable are not included on this forecast, rather they will continue to be reported on the quarterly construction summary and on Form SD-2731.

- (c) Requires signature of General Plant Manager or other authorized representative to insure authenticity of the long-term forecasts mentioned in "(b)" above.
- (d) Provides for active participation of General Plant staff, Commercial, Engineering, Merchandising and Market Research representatives in the development of requirements for Station, Booth and P.B.X. items.
- (e) Eliminates need for special requests for estimates of requirements for established major items through other channels.
- (f) Provides for wider distribution of these statements of official requirements.
- 1.04 The Chief Engineer will continue to canvass the Companies for initial views of requirements for new items prior to their introduction in order to aid the Western Electric Company in planning production capacity.
- 1.05 This practice brings together all of the relevant information from a System viewpoint and accordingly supersedes and cancels P.O.L. 1189 and all other printed material covering this subject.
- 1.06 The Plan covered by this practice is separate and distinct from the periodic long-term estimate of materials, such as central office equipment, exchange, toll, quadded cables, etc., which is prepared by the Chief Engineers and submitted on Form SD-2731 to the Western Electric Company Distributing Houses.

#### 2. SUMMARY OF MAJOR RECOMMENDATIONS

- 2.01 The following briefly summarizes the major recommendations which are included in this issue of the Plan:
  - (a) The supplies organization is charged with the fundamental responsibility for the coordination and development of requirements estimates for items included in the Plan.

- (b) Other departments are expected to provide certain basic data for use in estimating requirements. In addition, it is expected that the Supplies Requirements Supervisor will obtain first-hand information by attending departmental conferences which affect material requirements, and by means of periodic discussions with departmental staff people. The coordination and summarization of this information in terms of estimated requirements is the primary responsibility of the Supplies Requirements Supervisor.
- (c) Because of its effectiveness most Companies have found it advantageous to regularly consult with their Distributing House people concerning the estimated net requirements of new materials to be included on the Form SD-1251, Quarterly Forecast of Requirements for New Materials, which is forwarded by the Distributing Houses to the Program Planning Organization at New York. It is recommended that, in addition to the Supplies Requirements Supervisor, representatives of the Engineering, Commercial, Merchandising and Market Research organizations and the General Plant staff be invited to attend these conferences so that all may have full understanding of supply conditions, merchandising, construction and plant programs and their effect upon requirements, particularly with respect to Station, Booth and P.B.X. items.
- (d) As a considerable part of the requirements of Station Key Items may be furnished from repaired Class "C" stocks, it is essential that the Distributing Houses be able to program the activities of their repair shops and the stock maintenance people make proper allowance for the repair shop output in computing their net requirements of new items. For these reasons the forecasts of requirements and returns of Station Key Items must be closely coordinated with the scheduling of production of repaired materials as described in Bell System Practice Section 741-002-001, Distributing House Shop Repair Schedule.
- (e) The use of System standard forms is not intended. However, Western Electric Company's Form SD-1251, Quarterly Forecast of Requirements for New Materials, will be used by all Distributing Houses for reporting the net requirements of new materials. Station, Booth

and P.B.X. requirements have been segregated from the requirements for other items because of the need for a longer-term view with respect to the former. Form SD-1251 will not only include quarterly estimates of Distributing House requirements for the current and next succeeding quarter which will reflect adjustments for Distributing House stocks, but will also contain the official statement of the Telephone Companies' views of their new requirements for the current year and the next succeeding year. Form SD-1251 will also provide for approval of these official long-term views by the authorized representative of the appropriate level of Telephone Company management. For Outside Plant Key Items and for all special items the form will continue to show estimates of requirements for only two quarters. Quarterly revisions of the forms will continue to be furnished to the Distributing Houses by Program Planning sufficiently in advance to permit preparation for the quarterly requirements conferences. The Plan does not require forms specifically designed for estimating purposes except in one or two instances. The latter can be cared for by locally designed forms.

(f) It is recommended that all quarterly requirements be computed initially based upon delivery dates. Subsequently, at the quarterly conference, the Supplies Requirements Supervisor and the Distributing House people will make any necessary quantity adjustments on an over-all basis to care for estimated differences between shipping and delivery dates.

(g) Form SD-1251, Quartely Forecast of Requirements for New Materials, is prepared and revised jointly by W. E. Program Planning and A. T. & T. Co. (Operations) representatives. The list of Key and Special Items contains the minimum breakdown necessary for planning purposes. The term Key Item refers to the over-all groups for which the Telephone Companies will prepare estimates. For the Station Key Items, the subdivisions are derived from the experience records used in connection with the repair shop scheduling plan and from the stated needs of the factories. In instances where the basic information used by the Telephone Companies in developing the estimates is in greater detail with respect to types, codes or sizes than the Key Items, such detail shall be given to the Distributing Houses.

At the quarterly conferences the Distributing House people with the general advice of the Supplies Requirements Supervisor will make such divisions of the Key Items as are required in their quarterly reports of the net requirements of new items to the Program Planning Organization in New York.

(h) For manufacturing or procurement reasons, the Western Electric Company Program Planning Organization has found it necessary from time to time to obtain estimated requirements of certain specific items for limited periods. The Plan provides a separate group for such items having the designation "Special Items, (Temporary)." Forecasts of General Items are confined to those originated by the Telephone Companies for unusual requirements of specific types and codes which may or may not be a part of a key item.

#### 3. KEY ITEMS

For the Telephone Companies to forecast the requirements for each of the items needed to construct, maintain and operate the telephone plant would obviously be impractical. The Plan recognizes this difficulty and to overcome it certain principal items are designated as "Key Items." The requirements for these Key Items provide a sound basis for the Western Electric Company to estimate the quantities of other items which are required for use with the Key Items. For example, an equipped crossarm consists of prepared timber, pins for insulators and two diagonal braces. In addition, glass insulators and bolts and washers for attaching the crossarm and the braces to the pole are required. The Telephone Companies need estimate only the requirements of crossarms, since the broad requirements of pins, bolts, washers, braces and insulators can be determined from the Key or Basic Item by the interested organizations in the Electric Company. The Key Items listed on Form SD-1251, Quarterly Forecast of Requirements for New Materials, have been carefully selected to present to the Distributing Houses an estimate of future needs which will be subsequently divided into the types and sizes needed based on past experience as well as the necessary supplemental items.

3.02 The Plan requires that the Telephone Companies also estimate their returns of the

Station Key Items to the Distributing Houses. The estimate of returns of the Station Key Items is primarily used for determining the quantities which will become available for repair and reissue during the quarterly periods and, in conjunction with the estimated requirements of the same Key Items, for scheduling the repair shop output and determining the quantities of new station equipment which must be purchased.

In the course of developing the requirements, returns and revisions, it is recommended that the quantities be computed initially on the basis of the normal unit of expression used by the Telephone Company operating people and submitted to the Distributing Houses on the same basis. The required computations to change the data into units of expression required by the Program Planning Organization will be made by the Distributing Houses. For example, the estimated requirements for cable are originally developed on a basis of linear (sheath) feet by size. The total requirements for the quarter can be summarized by the Supplies Requirement Supervisor and given to the Distributing House in form of totals by sizes separately for specific estimates and for routine work. This will enable the Distributing Houses to utilize this basic information for local stock maintenance purposes and at the same time eliminate the clerical effort in the Telephone Company presently required to calculate the requirements for each item on each project in terms of millions of conductor feet.

3.04 Appendix A is a typical Form SD-1251,
Quarterly Forecast of Requirements for
New Materials, on which requirements of new
materials are reported quarterly by each Distributing House to the Western Electric Company
Program Planning Organization.

#### 4. GENERAL ITEMS

and the term "General Item" is used to designate any specific code, type or size of an item when the estimated demand for that item is expected to deviate appreciably from normal. For example, included in the Key Item classification of "Booths-Wood — Indoor" is the KS-14125 Blower; if the Telephone Company's program anticipates an unusual demand for that item the estimated requirements should be reported sepa-

rately as a General Item. Also included in the classification of General Items is any specific code, type or size of an Associated Item if the requirements for that Associated Item are appreciably out of balance as related to its Key Item. In addition to the foregoing, the General Item classification includes any other item of material or tools if the requirements are expected to appreciably increase or decrease as compared to the normal trend. Excluded from the General Item classification are those designated as Special Items described in Part 5.

4.02 The Western Electric Company, in using the estimates of Key Items as a base for developing the requirements of equivalent program items, associated items and specific codes and types comprising the Key Items, relies on a normal relationship of these various elements in their calculations. Slight variations in these relationships present no appreciable difficulty in the operation of the Plan. However, major changes in the operations which appreciably affect these relationships or create unusual demands for items which are not components or associates of Key Items, for example, tools, central office repair parts, etc., are of vital importance.

Changes in plant and engineering practices, large plant betterment programs. major additions of employees to the crafts in the Plant Department, changes in tariffs, and proposed merchandising and sales campaigns. planned replacement of obsolete sets, etc., which create unusual demands for specific items, will, if not interpreted in terms of their effect on future material and tool requirements, lead to the use of unsatisfactory and expensive expedients to provide the required items in time to meet these conditions or to unnecessary expense in carrying unwarranted stocks. As a direct method of determining the effect upon supplies requirements of contemplated major changes in practices or new and unusual activities, it is suggested that the Supplies Requirements Supervisor develop close contact with departmental representatives and attend any conferences having to do with planning activities which affect the appropriate Commercial, Traffic, Engineering, Merchandising and Plant staff heads. As a further step it will be found desirable, in order to currently anticipate unusual needs for materials, for the Supplies

Requirements Supervisor to informally discuss from time to time with the various departmental staff people the present and probable future supply situation as related to any plans upon which they are working.

4.04 This procedure will permit the Supplies Requirements Supervisor, through his familiarity with planned activities affecting material requirements, to appraise such activities in terms of the variation from normal requirements of particular items. If, for the area as a whole, the requirements will be appreciably affected either upward or downward, the Distributing House should be advised at once. It is felt that the foregoing procedure for keeping the Distributing House currently informed of requirements for General Items has some advantage over the practice of depending upon the field and staff people to originate forms bearing their interpretation of materials required for the proiected activities.

#### 5. SPECIAL ITEMS (TEMPORARY)

- 5.01 Included in this classification are specific items for which quarterly estimates are requested by the Western Electric Company Program Planning Organization. Estimates of these items may be required from time to time because of temporary manufacturing or procurement reasons. As the conditions which required these estimates are cleared up, the items will be deleted from the Special Items classification.
- 5.02 In such cases where the Special Item is a component of a complete unit, the Telephone Companies' estimates of requirements will include only those components which they expect to order separately and apart from the complete unit. The Western Electric Company Distributing Houses will prepare estimates of the components needed for shop repairs, conversions and to equip new units prior to shipment to the Telephone Companies.
- 5.03 The Western Electric Company will advise the Telephone Companies through the Distributing Houses well in advance of the need for Special Items estimates and remove them

promptly when such estimates are no longer required.

## 6. QUARTERLY PERIODS TO BE COVERED BY THE ESTIMATES

- 6.01 Each quarterly estimate consists of (1) a final estimate of requirements and returns for the next succeeding quarter and (2) a preliminary estimate of requirements and returns for the second succeeding quarter. Thus, each three months the previous preliminary estimate is replaced by a final estimate covering the same quarter. The estimates should be based on required delivery dates and not on shipping dates.
- 6.02 In addition to the above, for Station, Booth and P.B.X. Items (Form SD-1251), the official statement of the Telephone Company's view of requirements for the current year and the next succeeding year will be shown. These estimates will not be altered to reflect Distributing House stock adjustments.
- 6.03 Each Company should develop schedules for receiving from the various areas and departments the contributory information essential to the preparation of the estimates. These dates will vary with the types of organization, the size of the Company, and the detailed methods selected for preparing the estimates. In Companies served by more than one Distributing House sufficient lead time should be allowed to permit orderly preparation of the official views of long-term requirements and the appropriate breakdown of these requirements by houses. In any event, sufficient time should be allowed to summarize the Station Key Item requirements and returns and permit the preparation of the repair shop production schedules before the date set for the quarterly joint conference between the Supplies Requirements Supervisor and the Distributing House people. In the preparation of the repair shop production schedules the estimated total requirements and returns of the Station Key Items are used as a base for determining the types and codes of station equipment which the shop should produce during the succeeding quarters. As a result of this procedure the requirements over and above the shop production become the estimated net requirements of new items. The latter figures are then available for consideration at the quarterly joint conference.

6.04 In order to permit the Western Electric Company to combine the System requirements of new materials and arrange procurement and manufacturing schedules, each Distributing House must forward a quarterly statement of the estimated requirements of new materials which it expects to order from the factories and suppliers, to the Program Planning Organization of the Western Electric Company at New York. To be of greatest value it is essential that these quarterly statements from the Distributing Houses be received at New York by a predetermined date. Sufficient allowance must be made preceding the date due at New York for the preparation of the statement by the Distributing House and for mailing. In view of the foregoing, the following are recommended as the latest dates for the quarterly joint Telephone Company and Distributing House conferences:

| PERIODS TO BE<br>COVERED BY<br>JOINT CONFERENCES |            | TIME LIMIT FOR JOINT CONFERENCES |
|--|------------|----------------------------------|
| Fourth Qtr.<br>First Qtr.                        | (F)<br>(P) | October 1                        |
| First Qtr.<br>Second Qtr.                        | (F)<br>(P) | January 2                        |
| Second Qtr.<br>Third Qtr.                        | (F)<br>(P) | April 1                          |
| Third Qtr.<br>Fourth Qtr.                        | (F)<br>(P) | July 1                           |

- (F) Final Estimate
- (P) Preliminary Estimate

terly Construction Summary views prepared by the Chief Engineers. From time to time these views include certain items of station apparatus, principally those involved in merchandising activities, which also are reported on the regular quarterly forecast. To the extent that the same items appear on both forecasts, the estimates submitted should be identical for comparable periods.

#### 7. INTERIM REVISIONS OF QUARTERLY ESTIMATES

7.01 During the three-month period between the preparation of the preliminary estimate of the requirements for a particular quarter and the preparation of the final estimate for the same quarter, it is essential that the Distributing

Houses be advised of any major changes in requirements.

7.02 As in the case of the preliminary and final estimates, the total quantities involved in any major revisions must be interpreted in terms of their effect upon the net requirements of new materials and upon the repair shop production schedules and in some cases upon the maintenance of stocks at the Distributing House. It follows, therefore, that the same approach, namely a joint discussion between the Supplies Requirements Supervisor of the Telephone Company and the Distributing House people, would appear to be the most practical method of evaluating the effect of any interim major revisions of the preliminary estimates.

7.03 Revisions of the final estimates with respect to their effect upon manufacturing programs and factory stocks are of doubtful value and should be avoided. Generally the manufacturing processes for materials required for the current quarter are in an advance state and the bulk procurement arrangements with suppliers also have been partially or entirely completed. However, from the viewpoint of their effect upon the maintenance of stocks at the Distributing Houses, revisions of final estimates may be of value in such instances which involve appreciable changes in stocks of associated items. as is sometimes the case under the plan of direct distribution of supplies where the Associated Items are ordered daily from the Distributing House as the work progresses.

7.04 As a general guide for determining whether a change in the estimated requirements of a particular Key Item constitutes a "Major" revision, it is suggested that it be so considered if the quantity involved in the change exceeds 10 per cent plus or minus of the total requirements of that Key Item for the Company as a whole for the quarter.

#### PRINCIPAL OPERATING FEATURES OF THE PLAN

- 8. OUTSIDE PLANT KEY ITEMS FOR PROJECTS AND SPECIFIC ESTIMATES
- 8.01 From the time it becomes known that an outside plant project may be required,

until it assumes the form of an approved specific estimate and the material is ordered, several changes in the estimated requirements of material usually occur. The project may be cancelled or indefinitely deferred, the quantity and types of items may be changed, or the final date of completion may be appreciably changed. This changing picture of requirements has always presented a difficult problem and the following suggestions have as their objective the relief of the Engineering and Construction field supervisory people from much of the detailed work required to incorporate the changes in the preliminary and final estimates of requirements and in originating major revisions. The centralized control made possible by the procedures outlined below should also operate toward increasing the accuracy of the Outside Plant Key Item Estimates.

8.02 A "Project Sheet" is prepared at the time when it is first decided that a project is necessary and, in general, its scope and probable cost can be broadly calculated. This form is forwarded to the individual responsible for Plant Engineering who follows up for the submission of estimates, etc. It is suggested that the "Project Sheet" when prepared include estimates of the quantities and the probable time when the Key Items will be required. A typical "Project Sheet" is illustrated in Appendix B. An additional copy of this form should be prepared for each plant project and forwarded to the Supplies Requirements Supervisor.

8.03 Upon receipt of the form by the Supplies Requirements Supervisor, it should be placed in a file indexed by quarters in accordance with the quarterly estimating periods. At the end of each month the Supplies Requirements Supervisor should prepare a checking list of all of the forms in file showing the name and project number, the estimated quantities of Key Items and the probable required delivery date. A typical checking list is illustrated in Appendix C. Separate check lists should be prepared and forwarded to each appropriate Engineering representative. Similar checking lists should be prepared for all approved estimates for which the material has not yet been ordered. The specific estimate checking lists should be sent to the appropriate Construction supervisors.

8.04 Upon receipt of the project checking lists by the Engineering organization, each item

on the list should be reviewed. If a project has been cancelled, it should be so noted or if the project has been approved as a specific estimate, the estimate number should be shown. If the estimated quantities of Key Items or the estimated delivery dates have been changed, the revised quantities and changed delivery dates should be indicated.

8.05 The specific estimate checking lists should be similarly reviewed by the Construction organization. If the material has been ordered, the requisition number and date of the requisition should be noted on the list. In the event the item has been or will be ordered at intervals and in small quantities from the Distributing House stocks or obtained from existing Telephone Company stocks, it should be so noted and the requisition number may be omitted. The checking lists should be returned promptly to the Supplies Requirements Supervisor.

8.06 When the corrected checking lists are received by the Supplies Requirements Supervisor any specific estimate numbers, requisition numbers and changes in quantities or Key Items which are indicated on the lists should be posted on the original individual project sheets and in case of changed delivery dates the corrected form should be refiled under the appropriate quarter.

8.07 Preceding the quarterly joint forecasting conference, the project sheets for the two quarters ahead should be removed from the file and the requirements for each of the two quarters summarized.

8.08 As the corrected monthly project checking lists are received by the Supplies Requirements Supervisor, they should be reviewed and if the changes are of sufficient extent, the data should be summarized and the Distributing House immediately advised as outlined in Part 7—"Interim Revisions of Quarterly Forecasts."

8.09 Attention is directed to the necessity of including the estimated requirements of Outside Plant Key Items needed in connection with toll projects, the cable for which is not a Key Item and has been handled on a questionnaire basis.

#### 9. OUTSIDE PLANT KEY ITEMS FOR ROUTINE WORK

9.01 The principal factors which should be considered in developing the estimated quarterly requirements of Outside Plant Key Items for routine work are: (a) information concerning past shipment of the Key Items for routine work. (b) the Plant Engineering organization's judgment regarding the extent of the routine outside plant program for the two succeeding quarters, (c) the Construction organization's projected work schedules for the same periods, (d) requirements for large plant betterment jobs of a nonrecurring nature, (e) an estimate of the quantities which will be obtained from recovered materials, excluding Class "C" stocks, (f) any expected change in the inventories of field stocks and (g) the effect upon routine work of any major increases or reduction in the over-all specific estimate program for the same quarters.

9.02 Where, within practical limitations, all of the Key Items for routine work are drawn from the Distributing House stocks, excluding poles and conduit, and it is the practice to have specific estimate Key Items shipped direct from the factories, it is suggested that the Distributing House furnish the Supplies Requirements Supervisor with a summary of the pertinent items shipped from stock during previous quarters. This will, in effect, provide the necessary background data with regard to the Key Items for routine work. At locations where appreciable quantities of Key Items are shipped from stock for specific estimate work, and for poles and conduit, the following alternative method is suggested. From the perpetual inventory and average price records maintained by the Accounting Department, obtain a record of the total usage for the preceding calendar quarters of each of the items which comprise the groups designated as Outside Plant Key Items. Prepare a similar tabulation of usage during the same periods of the same items which are also maintained by the Accounting Department. The quantities used for specific estimate work should then be deducted from the total usage. The balance will represent the usage for routine work. Adjustments may be made, if necessary, for any known differences in quantities between deliveries and usage.

**9.03** The process of developing the quarterly estimated requirements for routine work

requires the coordinated judgment of the Plant Engineering, Construction, and Supplies organizations. There appears to be no practical method of reducing such forecasts to exact formulae. A review of the details of past history by representatives of the three organizations in conference and careful consideration of the probable effect of each of the factors enumerated in Paragraph 9.01 should enable the conferees to arrive at a general agreement covering the estimated requirements for the two succeeding quarters.

9.04 Where detailed information concerning cable to be furnished from the Distributing House stock is considered necessary for stock maintenance purposes, the Supplies Requirements Supervisor will aid the Electric Company in estimating such requirements. The summaries of cable requirements by linear feet by sizes separately for specific estimate and routine work should be helpful in this respect.

9.05 The estimated requirements for routine work and for specific estimates and projects should be furnished to the Distributing Houses prior to the quarterly conferences, summarized separately and in whatever detail with respect to types, sizes and codes may be available.

#### 10. STATION KEY ITEMS

10.01 The Station Key Items are a most important part of the requirements forecasting plan, and, consequently, should be given the utmost consideration by all concerned. Active inter-departmental participation and careful consideration of all elements are essential to accurate and realistic results in this phase of requirements forecasting. Those involved in the forecasting of requirements for Station Key Items must have a clear, up-to-date and full understanding of management policy with respect to all current and planned construction, maintenance, modernization, merchandising and betterment programs as well as the current and future levels of customer demand. These factors become increasingly important in view of the rapidly expanding diversity of customer equipment and services, and suggest the need for more technically qualified forecasters and perhaps a higher level of supervision than has generally been deemed necessary.

10.02 In developing the estimated requirements for Station Key Items, it has been found that the procedure which produces the best results is one which includes an entire operating area or Company as the base for the estimate, rather than the preparation of separate estimates by districts or divisions and subsequent summarization to obtain the total.

10.03 It will be noted from the typical list of Station Key Items shown on Appendix A (Sample Form SD-1251) that a more detailed breakdown of telephone set requirements is necessary due to the widespread introduction of color and certain merchandising specialty items. Whenever possible, however, the Key Item combines in one total several types or codes of equipment. This simplification is possible through the utilization of results obtained in the preparation of the repair shop production schedules, whereby the total estimated requirements and returns of each Key Item is divided into types and codes in order to determine what part of the requirements can be furnished from repaired stocks, the balance representing the net requirements of new items. The quarterly joint conference then has available this information as a basis for estimating the net new material required.

telephone sets do not require a breakdown by individual colors, such a breakdown is required at the time orders are placed on the Western Electric Company for the next month's desired shipments. Greater assurance of availability of particular colors will be possible if the Supplies Requirements Supervisor will maintain close contacts with the Market Research or Merchandising organizations and a constant analysis of individual color trends in customer demand so that prompt notification of any indicated shifts can be made to the Distributing House requirements and Program Planning organizations.

10.05 The primary basis for estimating the future requirements and returns of telephone sets which, of course, is one of the most important of the Station Key Items, are the estimates of inward and outward station movement for the two succeeding quarters, which can be obtained from the Commercial Department. The following paragraphs outline the principal factors which are a necessary part of the calcula-

tions used for developing the estimated requirements and returns.

- 10.06 Inasmuch as the quarterly estimate of inward station movement received from the Commercial Department includes the connection of new subscribers plus changes of address in, adjustments of this figure and additions for other activities are necessary to obtain the number of telephone sets the Electric Company will be asked to furnish. The principal factors which must be considered are as follows:
  - (a) Commercial estimate of inward movement.
  - (b) Minus reconnections completed without changing the set.
  - (c) Minus sets reused by workmen.
  - (d) Minus recovered sets reissued by store-rooms.
  - (e) Plus sets required to replace those reported as lost.
  - (f) Plus sets used in connection with instrument change orders (change in type of working station including AMA, Zone 5, customer request, etc.).
  - (g) Plus sets used for replacements for maintenance reasons.
  - (h) Plus sets used for dial conversions, duplicate service, or preinstalls.
  - (i) Plus or minus estimated increase or decrease in field stocks of telephone sets.
  - (j) Equals estimated requirements for telephone sets from the Electric Company.
- 10.07 The Commercial estimate of outward station movement includes disconnected subscribers, plus changes of address out. In developing the estimated returns of telephone sets, which includes all telephone sets classified as "good," which are to be returned to the Electric Company, the following factors must be included:
  - (a) Commercial estimate of outward movement.
  - (b) Minus stations disconnected but not removed.
  - (c) Minus sets held for reuse by workmen.

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- (d) Minus sets held for recovery by storerooms.
- (e) Minus sets reported as lost.
- (f) Minus sets removed from plant and which will be classified as junk or dismantle salvage when returned to the Distributing House.
- (g) Plus sets removed on station change orders. (Change in type of working station.)
- (h) Plus sets removed for maintenance reasons.
- (i) Plus sets obtained in connection with the removal of left-in stations.
- (j) Plus sets removed on account of dial conversions.
- (k) Plus sets reported as found.
- (1) Equals estimated returns of telephone sets to the Electric Company.

10.08 In developing the quantities required to modify the Commercial Department's estimates of inward and outward movement, it will be found that past history for some of the factors may be useful as a guide and in some instances this can be obtained from available records in the Plant or Accounting Departments. Others, such as reuse by workmen, may be determined within reasonable limits by a process of elimination. If. in the overall, the percentage relationship of the actual disbursements to the inward station movement and the actual returns to the outward station movement has been relatively constant over a period of time, it would appear reasonable to utilize such percentages in place of the numerous calculations indicated above. This method, of course, assumes that no unusual factors will be present. The quantities of talking sets which will be required and returned as a result of dial conversion and other major projects can be obtained in the manner described in the succeeding Paragraph 10.09.

office and large multiple P.B.X., major transfers of stations from manual to dial areas and major zoning changes, are usually covered by specific estimates, or special project order. The station activities in connection with such jobs

must necessarily be scheduled well in advance of the apparatus requirements in order to coordinate with building, central office installation and outside plant completions and it is customary for the Engineering organization to prepare individual "Project Sheets" for each dial conversion and major station transfer. The estimated requirements of Station Key Items should be shown on plant projects and copies of dial conversion "Project Sheets" should be forwarded to the Supplies Requirements Supervisor.

10.10 In cooperation with the District Plant or other organizations responsible for conversions, the Plant Project forms are reviewed monthly and based upon the cutover dates and station change schedules, the Key Items required for each project are included in the appropriate quarterly requirements.

10.11 As an aid in providing large quantities of station supplies from Distributing House stocks for conversions in an orderly manner, it has been found advantageous to have the organization handling the station change activities prepare a detailed shipping schedule which lists by specific codes the quantities of the major items of supplies required each week during the station change period. This schedule should be prepared and forwarded to the Electric Company via the Supplies Requirements Supervisor as soon as the specific estimate has been approved and details of the station change operations have been worked out.

10.12 A suggested procedure for developing the requirements of Station Key Items other than telephone sets is as follows: The Supplies Requirements Supervisor will obtain quarterly from the Commercial Department, an estimate for the periods specified of the inward and outward movement for each of these Station Kev Items and a record of the actual inward and outward movement for the preceding quarters. The relationship of the actual inward and outward movement to the shipments and returns for the preceding quarters modified by any unusual conditions, such as dial conversions, C.O. releases, zoning changes, etc., should provide an adequate base for projecting the estimated requirements and returns for the succeeding periods. A record of the actual shipments and returns may be obtained from the monthly summaries furnished

to the Accounting Departments by the Distributing Houses. These summaries show, by codes and types, the quantities shipped new and the Class "C" reissues and returns. The total requirements and returns for each of these items are then used in developing the repair shop production schedules and in estimating the net new requirements by codes and types. The estimated net requirements of new materials may then be reviewed at the joint quarterly conference.

## 11. MOBILE RADIO AND SUBSCRIBER LINE CARRIER KEY ITEMS

11.01 Past history covering requirements and returns of Key Items in this category would now appear to be of considerable aid in estimating future requirements and returns. These historical data, supplemented by forecasts of future activities affecting such items obtained from the staff people in Commercial, Plant and Engineering who are usually concerned with operations in these specialized fields, should provide the most reliable basis for forecasting future needs. Therefore, it is suggested that the Supplies Requirements Supervisor keep in constant touch with these sources of information to aid in developing the estimated requirements and returns. Careful consideration should be given to any surplus field stocks and to the availability of items which may be advertised for sale by other Companies through the Central Record Plan. Figures indicating the rate of growth in mobile radio installations and the number required for maintenance replacements are available in all Companies and should be used in reviewing the reasonableness of the estimates. The types of mobile telephone sets furnished by the Telephone Companies for private systems have been included as Key Items. It is essential that the Distributing Houses be kept advised of the estimated requirements for these items as far in advance as practicable. It is expected that the Supplies Requirements Supervisor will immediately advise the Distributing House when negotiations are started on such projects and when final authorization is obtained.

#### 12. QUARTERLY CONFERENCES

12.01 The principal objective of the quarterly conferences is to aid the Distributing

House organization in preparing an estimate of the quantities which will be ordered from the factories and suppliers of each of the material categories listed on Form SD-1251, Quarterly Forecast of Requirements for New Materials during each of the succeeding two quarters.

12.02 As mentioned heretofore, the Key Items used by the Telephone Company in their initial estimating procedure have, in certain instances, been broadened to include in the one Key Item several of the separate categories listed on the Form SD-1251. In case of the Station Key Items, the joint conference will have available for consideration the details resulting from the preparation of the repair shop production schedules. These detailed computations will include, by types and codes for the important items, the expected shop production, Class "C" reissues, and the estimated quantities, over and above these available from Class "C", which must be provided in the form of new material. Certain of the Outside Plant Key Items also include more than one category as listed on Form SD-1251. The Plan contemplates that the joint conference will, on a basis of past history and expected future trends, make appropriate divisions of the total Outside Plant Key Item estimates to meet the breakdowns required on Form SD-1251.

ing House representatives at the conference will have available at the conferences the necessary data regarding present stock levels, quantities due on open orders both for stock and direct shipments and Class "C" stock conditions, including unrepaired and unusual quantities in process and past history covering shipments of new and Class "C" items to the Telephone Company, as an aid in determining the net new material requirements for each of the quarterly report forms.

quantities of Key Items and General Items forecasted by the Telephone Company for the two quarters ahead will represent what should be delivered to meet their work programs and schedules. As the quarterly estimates of new material used in the preparation of Form SD-1251 are based upon the dates shipments are required from the factories or suppliers, it may be necessary in some few instances for the conferees to

make slight adjustments when the in transit carryover between quarters is expected to differ appreciably. It appears more practical to make this adjustment on an over-all basis at the quarterly joint conference rather than have the field forces compute the shipping interval and adjust each individual Key Item and General Item estimated on each project or specific estimate. Except in relatively infrequent instances, it is expected that the carryover from one quarter to the next will, within practical limitations, be the same and no adjustments will be necessary.

conferences be attended by an interdepartmental team headed by the Supplies Requirements Supervisor, the team to consist of qualified representatives of the General Plant staff, Commercial, Engineering and Merchandising organizations, in order that there will be full understanding and concurrence with respect to the forecasts to be submitted. Such interdepartmental collaboration is particularly important in connection with the forecasting of Station, Booth and P.B.X. requirements.

## 13. LONG-TERM FORECASTS, APPROVALS AND DISTRIBUTION — FORM SD-1251

13.01 Form SD-1251, Quarterly Forecast of Requirements for New Materials, will represent the only official statement of long-term requirements for the Key Items listed thereon for each Company. In Companies served by more than one Distributing House the official view of long-term requirements should appear on the Form SD-1251 submitted by the Distributing House located in the Telephone Company head-quarters city. A division of long-term requirements between the various houses serving the Company may be made if desired locally but

these estimates need not be included on the reports submitted to New York.

vill be listed on the forms prepared for each quarterly review. Generally speaking, complete detailed breakdown of long-term requirements for the succeeding year will not be requested until the last two current year reviews submitted in July and October, as it is doubtful that realistic estimates in such detail can be presented so far in advance.

official statement of long-term requirements for the Key Items listed for each Company, it will be necessary for each revision to bear the signature of approval by appropriate level of management. The General Plant Manager or his authorized representative is considered appropriate authority for single area Companies. The Plant Operations Engineer or equivalent Company staff representative would constitute appropriate authority for multiarea Companies.

13.04 After approvals the Distributing House will furnish reproduced copies to the local Telephone Company and to the Program Planning Organization in New York. Arrangements can be made locally to have sufficient copies furnished to permit distribution to all departmental representatives who have a direct interest in forecasts of requirements for new materials.

13.05 It is requested that each Company forward promptly to Plant Statistics Supervisor, American Telephone & Telegraph Company, 195 Broadway, New York 7, New York an approved copy of each quarterly revision of Form SD-1251. In the case of multiarea Companies only the Form SD-1251 showing the long-term requirements for the entire Company need be forwarded.

SD-1251 (4-56)

#### QUARTERLY FORECAST OF REQUIREMENTS FOR NEW MATERIAL

RETURN TO: ASSISTANT SUPERINTENDENT (PROGRAM RESULTS)

HOUSE -TEL. CO. --JULY 6, 1956 auf

| PROGRAM HESULIS) PROGRAM PLANNING ORG. 195 BROADWAY   | P.          | GE 1 OF 2 PAGES                       | 5                                     | 188UED                    | JULY 6, 1956                                     |  |
|---|-------------|---------------------------------------|---------------------------------------|---------------------------|--|--|
| STATION, BOOTH & P.B.X. PROGRAM ITEMS   | <del></del> | NET NEW O.H. F                        |                                       | OFFICIAL TEL. CO. REGMTS. |  |  |
|   | UNIT        | 3mb q TM 1956 (A)                     |                                       | YEAR 1956 (B)             | YEAR 1957 (B)                                    |  |
| 1 SETS - TELEPHONE NEW, TOTAL (LINES 6-17)  | PCS         |                                       |                                       | ·                         |  |  |
| 2 FOR STATION GAIN 3 FOR OTHER PURPOSES   | PCS         | XX                                    | XX                                    |                           | <u> </u>   |  |
|   | PCS         | XX                                    | XX                                    |                           | ļ  |  |
|   | PCS         |                                       |                                       |                           | ļ  |  |
| 5 TOTAL-COLOR (LINES 7,9,11,13 AND 15)  | PCS         |                                       |                                       |                           |  |  |
| HULTI-KEY BLACK  T WALL-BLACK  B E WALL-BLACK  WALL-COLOR                                       | PCS         |                                       |                                       |                           |  |  |
| 8 # WALL-SLACK  | PCS         |                                       |                                       |                           | <del>                                     </del> |  |
| 9 8 WALL-COLOR  | PCS         |                                       |                                       |                           |  |  |
| MALL-COLOR  10 2 LLUMINATED DIAL-BLACK  | PCS         |                                       |                                       |                           |  |  |
| II 11 IE → III IIMI NATED DIAL -COLOR   | PCS         |                                       |                                       |                           | <del> </del>                                     |  |
| 12 VOLUME CONTROL-GOLOR  VOLUME CONTROL-COLOR   | PCS         |                                       |                                       |                           |  |  |
| 13 W VOLUME CONTROL-COLOR   | PCS         |                                       |                                       |                           |  |  |
| 14 OTHER COMB. TYPES-BLACK  | PCS         | · · · · · · · · · · · · · · · · · · · |                                       |                           | † · · · · · · · · · · · · · · · · · · ·          |  |
| 15 OTHER COMS. TYPES-COLOR  | PCS         |                                       |                                       |                           |  |  |
| 16 HANG-UP BLACK (D)  | PCS         |                                       |                                       |                           | 1  |  |
| 17 COLLECTORS, COIN   | PCS         |                                       |                                       |                           |  |  |
| 18 CONTROL UNIT SUB. SET  | PCS         |                                       |                                       |                           |  |  |
| 19 LOUGSPEAKER BLACK FOR SPEAKPHONE   | PCS         |                                       |                                       |                           |  |  |
| 20 LOUDSPEAKER COLOR SYSTEM (C)   | PCS         |                                       |                                       |                           |  |  |
| 21 TRANSMITTER BLACK  | PCS         |                                       |                                       |                           |  |  |
| 22 TRANSMITTER COLOR  | PCS         |                                       |                                       |                           |  |  |
| 23 152-162 MC, 1 & 2 FREQMOTOROLA   | PCS         |                                       |                                       |                           |  |  |
| 24 152-162 MC, 1 & 2 FREQ,- G.E.  | PCS         |                                       |                                       |                           |  |  |
| 24   152-162 MC, 1 & 2 FREQ, -HOTOROLA  | PCS         |                                       |                                       |                           |  |  |
| 26 0 30-44 MC, 1 & 2 FREQ G.E.  | PCS         |                                       |                                       |                           |  |  |
|   | PCS         |                                       |                                       |                           |  |  |
| 28 # 152-174 MC, 50WG. E.<br>29 # 5 152-174 MC, 30WMOTOROLA                                     | PCS         |                                       |                                       |                           | -  |  |
|   | PCS         |                                       |                                       |                           | <del></del>                                      |  |
|   | PCS<br>PCS  |                                       |                                       |                           |  |  |
| 31 ¥ 25-50 MC, 30WG. E.<br>32 5-50 MC, 50WG. E.<br>25-50 MC, 30WG. E.<br>25-50 MC, 30WGOUNDOOLA | •           |                                       | · · · · · · · · · · · · · · · · · · · |                           |  |  |
| 33 = 25-50 MC 30W -MOTOROLA   | PCS<br>PCS  |                                       |                                       |                           | <del></del>                                      |  |
| 33 = 25-50 MC, 30W, -MOTOROLA<br>25-50 MC, 60W, -MOTOROLA                                       | PCS         | <del></del>                           |                                       |                           | ·  |  |
| 35 450-470 MC, 18W, -HOTOROLA   | PCS         |                                       |                                       |                           | <del> </del>                                     |  |
| 36 450-470 MC, 20WG. E.   | PCS         |                                       |                                       |                           |  |  |
| 37 COMBUIT, CLAY  | DUCT. FT.   |                                       |                                       |                           |  |  |
| 38 COMPUIT, TRANSITE  | DUCT. FT.   |                                       |                                       |                           |  |  |
| 39 COMBUIT, FIBER   | DUCT. FT.   |                                       |                                       |                           |  |  |
| 40 TELETYPEWRITER - TYPING UNITS #15 (E)  | PCS         |                                       |                                       |                           |  |  |
| 41 TELETYPEWRITER - TYPING UNITS #28 (E)  | PCS         |                                       |                                       |                           |  |  |
| 42 TELETYPEWRITER - SEQUENCE SELECTOR #28 (E)   | PCS         |                                       |                                       |                           |  |  |
| 43 TYPING REPERFORATOR #14 (E) TRANSMITTEN REPERFORATOR #14 (E)                                 | PCS         |                                       |                                       |                           |  |  |
| 44 # TRANSMITTER REPERFORATOR #14 (E)   | PCS         |                                       |                                       |                           |  |  |
| 45 TRANSMITTER DISTRIBUTOR #14 (E)  |             |                                       |                                       |                           |  |  |
| 46 TRANSMITTER, PERFORATOR #15 (E)  |             |                                       |                                       |                           |  |  |
| 47 BOOTHS - WOOD - INDOOR   |             |                                       |                                       |                           |  |  |
| 48 BOOTHS - METAL - DUTDOOR   | PCS         |                                       |                                       |                           |  |  |
| 49 507A   | POS         |                                       |                                       |                           |  |  |
| 50 5078   | POS         |                                       |                                       | ,                         | <u> </u>   |  |
| 51 × 555<br>52 × 556 (F)  | 103         |                                       |                                       |                           |  |  |
|   | P08         |                                       |                                       |                           |  |  |
| 53 557 755  | P05         |                                       |                                       |                           |  |  |
| TAR U.S. CO 18880VAL OF HET HEU D. H. BEQUIDENENTS  | FRA         | A A                                   | C 0.551.01.11 251 00 0.501            |                           | 1  |  |

FOR W.E. CO. - APPROYAL OF NET NEW D.H. REQUIREMENTS

FOR TEL. CO. - APPROVAL OF OFFICIAL TEL. CO. REQUIREMENTS

| CORRECT  | CORRECT  |
|----------|----------|
| APPROVED | APPROVED |

- (A) TOTAL FOR STOCK AND DIR. SMPT., INCL. QUANS. DUE ON OPEN ORDERS SCHED. OR RESCHED. FOR SMPT. IN THIS QTR.
- (8) OFFICIAL TELEPHONE COMPANY VIEW OF NET NEW REQUIREMENTS.
- (C) ASSOCIATED TELEPHONE SETS ARE TO BE INCLUDED IN APPROPRIATE CATEGORIES (I.E. LINES 4, 5, 6, 7, 12, 13, 14,) INCLUDE 595 TYPE COMPONENTS ACCOMBINGLY.

  (D) INCLUDES 117 AND 211 214 TYPES ONLY. EXGLUDES LOOSE G TYPE MTGS. WHICH ARE INCLUDED UNDER "SPECIAL" ITEMS LINES 69 AND 70.

  (E) LONG LINES TELETYPEWRITER REQUIREMENTS ARE NOT FURNISHED BY THIS DIST. HOUSE BUT ARE OBTAINED BY THE L.L. SERVICE MOR. AT
  BROADWAY DIRECT FROM L.L. GENERAL DEPT.

- (F) SHOW IN ( ) QUANTITY OF KEARRY MODIFIED #556-A POSITIONS INCLUDED FOR USE WITH #740-8E DIAL P.B.X.

SO-1251 (4-56)

## QUARTERLY FORECAST OF NEW REQUIREMENTS FOR NEW MATERIAL

RETURN TO: ASSISTANT SUPERINTENDENT (PROGRAM RESULTS) PROGRAM PLANNING ORG. 195 BROADWAY

HOUSE \_ TEL. CO. \_\_ July 6, 1956 ISSUED

| PAGE 2 OF 2 P | A G | AGE | s |
|---------------|-----|-----|---|
|---------------|-----|-----|---|

| OUTSIDE PLANT PROGRAM LIEMS   | UNITS  | NET HEW D.H. REQUIREMENTS |                     |  |  |
|---|--------|---------------------------|---------------------|--|--|
|   |        | 3RD QTR 1956 (A)          | 4TH QTR. = 1956 (A) |  |  |
| 55 STOCK PLAN SIZES - LEAD COVERED (6)  | MCF    |                           |                     |  |  |
| 56 STOCK PLAN SIZES - ALPETH AND STALPETH (H)  57 NON-STOCK PLAN SIZES - LEAD COVERED INCL. PROTECTED  58 NON-STOCK PLAN SIZES - ALPETH AND STALPETH  | MCF    |                           |                     |  |  |
| 57 S NON-STOCK PLAN SIZES - LEAD COVERED INCL. PROTECTED  | MC F   |                           |                     |  |  |
| 1 1 1   | MC F   |                           |                     |  |  |
| 59 POLYETHYLENE INS. COMO. (INC. IN LINES 53 + 55)(1)   | MCF    |                           |                     |  |  |
| 60 CHOSSARMS, TOTAL INCL. CABLE ARMS & GUARD ARMS   | PCS.   |                           |                     |  |  |
| 81 STRAND, TOTAL ALL CLASSES AND SIZES  | FT.    |                           |                     |  |  |
| 62 WIRE & TIES, STEEL, TOTAL ALL TYPES (J)  | Las.   |                           |                     |  |  |
| 63 POLES, TOTAL ALL TYPES   | PCS.   |                           |                     |  |  |
| SPECIAL ITEMS - STATION   |        |                           |                     |  |  |
| 64 COILS, INDUCTION, 101A   | PCS.   |                           |                     |  |  |
| 65 DIALS, TOTAL ALL TYPES (UMMOUNTED ONLY)  | PCS.   |                           |                     |  |  |
| 66 HANDSETS - LOOSE FT TYPE   | PCS.   |                           |                     |  |  |
| 67 HAMDSETS - LOOSE F4 & F5 TYPES   | PCS.   |                           |                     |  |  |
| 68 MANOSETS - LOOSE G TYPE ( BLACK & COLOR)   | PCS.   |                           |                     |  |  |
| 69 HANDLES - LOOSE F TYPE   | PCS.   |                           |                     |  |  |
| 70 HANOLES - LOOSE G TYPE ( BLACK & COLOR)  | PCS.   |                           |                     |  |  |
| 71 MOUNTINGS - LOOSE & TYPE - BLACK   | PCS.   |                           |                     |  |  |
| 72 MOUNTINGS - LOOSE G TYPE - COLOR   | PCS.   |                           |                     |  |  |
| 73 HOUSINGS FOR 5300-5400 MODERNIZATION   | PCS.   |                           |                     |  |  |
| 74 HOUSINGS FOR 500 TYPE 2-TONE TEL. SETS   | PCS.   |                           |                     |  |  |
| 75 RINGERS BIAL   | PCS.   |                           |                     |  |  |
| 76 SETS - TELEPHONE ANSWERING #1  | PCS.   |                           |                     |  |  |
| 77 SETS - TELEPHONE ANSWERING #2  | PCS.   |                           |                     |  |  |
| 78 CABINETS, KEY TELEPHONE 50A, B & C   | PCS.   |                           |                     |  |  |
| 79 CABINETS, KEY TELEPHONE 200 D & E  | ecs.   |                           |                     |  |  |
| 80 UNITS, KEY TELEPHONE 51A, 52A  | PC8.   |                           |                     |  |  |
| 81 UNITS, KEY TELEPHONE 53A, THRU 57A INCL.   | PCS.   |                           |                     |  |  |
| 82 UNITS, KEY TELEPHONE 101A (J-53005 S.T.U.W.)   | PCS.   |                           |                     |  |  |
| 83 UNITS, KEY TELEPHONE 201A THRU 205A & 207A THRU 213A INCL.   | PCS.   |                           |                     |  |  |
| 84 UNITS, KEY TELEPHONE 212A (INCL. IN LINE 80)   | PCS.   |                           |                     |  |  |
| 85 JMITS, KEY TELEPHONE 1-33 TYPE (ALL CODES)   | PCS.   |                           |                     |  |  |
| 86 MEOPRENE - STRAIGHT  | PCS.   |                           |                     |  |  |
| 87 MEOPRENE - SPRING ( K)   | PCS.   |                           |                     |  |  |
| 88 48 VINYL PLASTIC - STRAIGHT  | PC\$.  |                           |                     |  |  |
| 89 VINYL PLASTIC - SPRING (K)   | PCS.   |                           |                     |  |  |
| 90 8 BRAIDED - STRAIGHT   | PCS.   |                           |                     |  |  |
| 91 BRAIDED - SPRING   | PCS.   |                           |                     |  |  |
| SPECIAL ITEMS - OUTSIDE PLANT   |        |                           |                     |  |  |
| 92 TERMINALS, CABLE - N TYPE  | PCS.   |                           |                     |  |  |
| 93 TERMINALS, CABLE - T TYPE  | PCS.   |                           |                     |  |  |
| 94 TERMINALS, CABLE - 49-A TYPE   | PCS.   |                           |                     |  |  |
| 95 WIRE, 8 - RURAL  | Talafa |                           |                     |  |  |
| 96 WIRE, B - URBAN  | T.L.F. |                           |                     |  |  |
| A PARTY DE LA CASA DE |        |                           |                     |  |  |

FOR W.E. CO.

| CORRECT |   | <br> | <br> |
|---------|---|------|------|
|         | _ |      |      |

- (A) TOTAL FOR STOCK AND DIRECT SHPT. INCL. QUAN. DUE ON OPEN ORDERS SCHEDULED OR RESCHEDULED FOR SHIPMENT IN THIS QUARTER.
- (G) FMCL. NOM-PROT. CABLE 6 THRU 202 PR. IN 19 GA. AND 11 THRU 404 PR. IN 22, 24 AND 26 GA. ALL OTHER SIZES AND ALL PROTECTED CABLE ARE NOM-STOCK.
- (H) INCL. NON-PAOT. CABLE 6 THRU 202 PR. IN 19 GA., 16 THRU 404 PR. IN 22 GA. AND 51 THRU 404 PR. IN 24 AND 26 GA. ALL OTHER SIZES AND ALL PROTECTED CABLE ARE NON-STOCK.
- (1) SHOW IN PARENTHESIS THE PORTION OF REQUIREMENTS WHICH COVER CABLE PER DWG. CA1727 (.066 MF. CAPACITANCE).
- (J) EXCLUDES COPPER STEEL WIRE.
- (K) INDICATE IN BRACKETS THE ADDITIONAL REQUIREMENTS WHICH YOU WILL HAVE FOR FACTORY EQUIPPED HANDSET SPRING CORDS.

### RECHARGE OUTSIDE PLANT PROJECT

| Alden Ave.Edgewood<br>to Chapel 606-24 1<br>Chapel & Alden to | <b>QLy.</b><br>1250' | Unit<br>Cost | Total<br>Cost | Acct.           | DRY ITEMS                                |      |          | Del.               | 1            | Del.         | 1            | T            |
|---|----------------------|--------------|---------------|-----------------|--|------|----------|--------------------|--------------|--------------|--------------|--------------|
| to Chapel 606-24 1 Chapel & Alden to                          | 1250'                |              |               | L               |  |      | Qty.     | Date               | Qty.         | Date         | Qty.         | Del.         |
| Chapel & Alden to   | 1250'                |              |               |                 |  | 11   |          |                    |              |              |              |              |
|   |                      | 2.318        | 2898.         | 5C              |  | 16   |          |                    |              |              | 1            |              |
| <del></del>   |                      |              |               |                 | STOCK CABLE                              | 26   |          |                    |              |              |              | <del> </del> |
| Forest & Derby  |                      |              |               |                 | (Lead or Alpeth)                         | 51   | 2700     |                    | <del> </del> |              |              | <b></b>      |
|   | 50001                | 2.328        | 11640.        | 2C              | SHEATH PEET                              | 76   | 700      |                    | <del> </del> | <del> </del> |              | <del> </del> |
| Derby AveForest   |                      |              |               |                 | SUPPLIE LEPT                             | 101  |          |                    | Typical      | individ      | ual nroi     | ect.         |
| Road to Maltby Lake   |                      |              |               |                 |  | 202  | 3500     |                    | sheet.       | Prepar       | ed by Di     | 3-           |
| X-Box 202-24 3  | 35001                | •999         | 3497•         | 2C              | \$ 22 Ga. and \$                         | 303  |          |                    | trict P      | lant En      | gineer a     | nd           |
| C.O. to Fountain St.  |                      |              |               |                 | smaller #                                | 404  |          |                    | forward      | ed to A:     | rea Plan     | t            |
| 606-24  | 3001                 | 2.318        | 695.          | 5C              | 4  | 303  |          |                    | proceed      | r for a      | pproval      | to           |
| Terminate 606 pr. on  |                      |              |               |                 | NON-STOCK CABLE                          | 455  |          |                    | enginee      | ring.        | If appro     | wad.         |
| MDF   |                      |              | 265.          | 5C              | (Lead or Alpeth)                         | 606  | 6550     | <u> </u>           | it is a      | ssigned      | a proje      | ct           |
| Plainfield Ave.   |                      |              | 200           | 20              | SHEATH FEET                              | 909  | 0550     |                    | number       | and one      | copy is      |              |
|   | 1700'                | •529         | 899.          | 2C              | Use blank spaces for                     | 1212 |          |                    | sent to      | Supplie      | es Requi     | re-          |
|   | 10001                | •529         | 529.          | 2C              | tape armored, gopher,                    | L    |          |                    | ments S      | uperviso     | or.          |              |
| Derby Ave. W/O  | 2000                 | • 2 = 7      | <u> </u>      |                 | jute, and corrosion prot'd and 19 Ga.    | 1818 |          |                    |              |              |              |              |
| Hillcrest 76-22   | 7001                 | .654         | 458.          | 2C              | 1 L                                      | 2h2h |          |                    | †            | <del> </del> | <del> </del> | <del> </del> |
|   | 155                  | •••          | 4,200         |                 |  |      |          |                    | <del> </del> | <del> </del> |              | <u> </u>     |
| Terminals   |                      |              |               |                 | #19 Ga. only.                            |      |          |                    | <del> </del> |              |              | <del> </del> |
| 10 pr.  | 31                   | 40.52        | 1256.         | 2C              | COMDUIT - CLAY Du.                       | Pt.  |          |                    |              |              |              | <u> </u>     |
| 16 pr.  | 7                    | 43.73        | 306.          | 2C              | CROSSARMS<br>POLES -                     |      |          |                    |              |              |              |              |
| 26 pr.  |                      | 53.17        | 53.           | 2C              | STRAND - Ft.                             |      | 26280    |                    |              | <u> </u>     |              |              |
| 20 pr.  |                      | 23.1         | - 23.         | 20              | WIRE BARECOP 1b<br>WIRE STEEL - 1b       |      |          |                    |              |              |              |              |
| mos:  | S ADDIT              | TORS         | L             | L               | WILL STEED - 10                          |      | 1        | Estin              |              | Acto         |              |              |
|   |                      |              | T             | Total           | Service date                             |      | -        |                    |              | AC 0         |              |              |
| FOV. 19T. 18638.  |                      | 5C<br>3858   |               | Total<br>22496. | To be submitted                          |      |          | 5-15-50<br>1- 5-50 | )            |              |              |              |
| S.DITID   |                      |              |               |                 | To be approved                           |      |          | 2 1-50<br>2-15-50  |              |              |              |              |
|   | ····                 |              | <del> </del>  |                 | Ley Items to be Or                       |      | i        | 2-15-50            |              |              |              |              |
| Placing _ 1186  |                      | Splicing     | 1 201.1       | <u> </u>        | Work to be Started<br>Work to be Corplet |      |          | <u>1-25-50</u>     | <u> </u>     |              |              |              |
| 11 12 - 1100  |                      | Spring.      | - 20111       | <del></del>     | Location and title                       |      |          | <u>)- 1-50</u>     |              |              |              |              |
| Must meet serv  | rice d               | late of      | 6-15 to       |                 | LOCALION AND CITIES                      | Are  | a Transf | er-For             | est Ave.     | -New Har     | mnden        |              |
| coordinate with cutove  | er of                | N. H. 3      | on 7-15.      | <b>-</b> ≤0     | Estimate Vo.                             |      |          |                    | est Ave.     | est To.      | 15017.       |              |
| COOLUMNADE WISH CUSOFC  |                      | ··· ·        | U44   - 12.   |                 |  |      |          |                    | - Dist.      |              | Date 9-      |              |

## CHECKING LIST OF OUTSIDE PLANT KEY ITEMS REQUIRED FOR ESTIMATES AND PROJECTS

| 11 1 - 46       | -Notriet-        |
|-----------------|------------------|
| 11-1-49<br>Date | CENTRAL Division |

In columns headed "Revised" show changes in quantities and sizes and Quarter in which delivery is wanted. If unchanged, indicate by a check-mark. Sign and return promptly to the Supplies Requirement Supervisor.

|                       |                        | Fumber, Heme and Location of Project or Estimate |         |          |         |         |         |                                       |              |         |              |   |              |
|-----------------------|------------------------|--|---------|----------|---------|---------|---------|---------------------------------------|--------------|---------|--------------|---|--------------|
|                       |                        | P-10   | 34      | P-42     |         | P-42    | 91      | P-4                                   | 748          | P-47    | 7.3          | P-4   | 256          |
| KET ITEMS             |                        | FORES  | T AVE   |          | ABLE    | RURAL   | EXTEN.  | INTER                                 | OFF. TRK.    | POLE RE | CONST        |   | CABLE        |
| 1                     |                        | N.H  | 3       | CARLT    | он Ех.  | PITTS   | STON    | Cot                                   | BY           | GULF    |              |   | PONT         |
| 1                     |                        | Present  | Revised | Present  | Revised | Present | Revised | Present                               | Revised      | Present | Revised      | Present   | Revised      |
|                       | 11                     |  |         |          |         | +       |         |                                       |              |         |              | 111111  |              |
| STOCK CABLE           | 16                     | 1  |         |          |         | Typica  | 1 pro   | iect c                                | heckir       | ng      |              |   |              |
| (Lead or Alpeth)      | 26                     |  |         |          |         |         |         |                                       | d by t       |         |              | 3900  | 5000         |
| SHEATH PEET           | 1 1                    | 2700   | ~       |          |         |         |         |                                       |              |         |              | 450Q  | 3000         |
| SHEATH PEET           | 78                     | 790  | レ       |          |         |         |         |                                       | ment S       |         |              |   | SEMERAL      |
| #22 Oa. and           | 101                    |  |         |          |         | visor   | montl   | hly an                                | d for        | varded  |              | 3000  |              |
| smalier               |                        | 3500   | ~       |          |         | to th   | e Plar  | nt Eng                                | ineer        | ing     |              |   |              |
|                       | <u> </u>               | <b></b>  |         |          |         |         |         |                                       |              | heck-   |              |   |              |
| <b></b>               | -thrut                 |  |         |          |         |         |         |                                       |              |         |              | <b>-</b>  |              |
| Quarter required      |                        | 2-50   | ~       |          |         |         |         |                                       |              | cessar  | y            | 7-50  | 2-50         |
|                       |                        |  |         |          |         | chang   | es it   | is re                                 | turne        | d and   |              | <b>—</b>  |              |
| MON-STOCK CABLE       | A3A3                   |  |         |          |         | incor   | norate  | ed in                                 | the qu       | ıar-    |              |   |              |
| (Lead or Alpeth)      | •30J                   | <del> </del>                                     |         |          |         |         |         |                                       |              | sed fo  | <del>-</del> | <b></b>   | <b></b>      |
| SHEATH FEET           | 166                    | 6550   |         |          |         |         |         |                                       |              |         |              | <del>                                     </del>  | <del></del>  |
| ODBALD PAGE           | 909                    | 2233   |         | 4500     | -       |         |         |                                       |              | ns whe  |              | 7000  |              |
| Use blank spaces for  | 1212                   |  |         | 7500     |         | requi   | red.    | Simil                                 | lar che      | ecking  |              | - IXVX  |              |
| tape armored, gopher, | 1515                   |  |         |          |         | lists   | are     | prenar                                | red for      | r an-   |              |   |              |
| jute, and corresion   | 1818                   |  |         |          |         |         |         |                                       | estim        |         |              | 1200  |              |
| protid and 19 Ga.     | 21,24                  | L  |         |          |         |         |         |                                       |              |         |              | ļ   |              |
| DMB cables.           | $\vdash$               | <b> </b>   |         |          |         |         | -       |                                       | the          |         |              | ļ   |              |
| 1                     | <b> </b>               |  |         |          |         | struc   | ction   | organi                                | izatio       | n for   |              | <b></b>   |              |
| #19 Ga. only.         | $\vdash \vdash \vdash$ | <del>                                     </del> |         |          |         |         | cing a  | _                                     |              |         |              | <b></b>   | <b></b>      |
| Quarter required      | L                      | <u> </u>   |         | X        | <b></b> | CHECK   | 6       |                                       |              |         |              | <del></del>                                       |              |
| American radirriag    |                        | 2-50   | -       | 2-60     | 3-50    | L       |         | J-50.                                 | 2-50         |         |              | 7-5a  | 2-50         |
| CLAY CONDUTT-Du. Ft.  |                        |  |         | 9000     | '       |         |         |                                       |              |         |              | 14500   | ~            |
|                       |                        |  |         |          | > ==    |         |         | · · · · · · · · · · · · · · · · · · · |              |         |              | <del>  `                                   </del> | <u> </u>     |
| Quarter required      |                        |  |         | 75a      | 3-50    |         |         |                                       | ļ            |         |              | 1-50  | -            |
| CROSSARMS-Each        |                        | <u> </u>   |         |          |         | 450     | ~       |                                       |              | 700     | -            | 1   |              |
| Quarter required      |                        |  |         |          |         | 2-50    | •       |                                       |              | 2-50    | ~            |   |              |
| -                     |                        |  |         |          |         |         |         |                                       | <del> </del> |         |              | <del>                                     </del>  | -            |
| POLES                 |                        |  |         |          |         | 520     | ~       |                                       | <b></b>      | 1450    | -            | 150   |              |
| Quarter required      |                        |  |         |          |         | 2-50    | -       |                                       | <u> </u>     | 2-50    | -            | 2-50  | ~            |
| STRAND-Feet           |                        | 74,090   | ~       |          |         | 20,000  | ~       |                                       |              | 9000    | •            | 28,000  |              |
| Quarter required      |                        | 2-50   | ~       |          |         | 2-50    | _       |                                       |              | 2-50    | -            | 2-50  | -            |
| BARE COPPER WIRE & T  | TRS                    |  |         |          |         |         |         |                                       |              | 1       |              |   |              |
| 150.                  | <b>==</b>              | ļ  |         |          | ļ       |         |         |                                       | ļ            | 1000    | -            |   | <b></b>      |
| Quarter required      |                        | <b></b>  |         |          | ļ       |         |         |                                       | <b></b>      | 2-50    | -            | ↓   | <del> </del> |
| STEEL LINE WIRE & TH  | ZS.                    |  | 1       |          |         | 30,000  | 20000   |                                       |              | 1000    | -            | 1   |              |
| Dia.                  |                        | <b>1</b>   |         | <b></b>  | <b></b> |         |         | <b> </b>                              | <del> </del> |         | ļ            | <del> </del>                                      | <del></del>  |
| Quarter required      |                        | <u> </u>   | <u></u> | <u> </u> |         | 3-50    |         | <u> </u>                              |              | 2-50    |              | <u> </u>  | <u> </u>     |
|                       |                        |  |         |          |         |         |         |                                       |              |         |              |   |              |

| Checked by | _9 | . R. De Voe       | nov. 10 1949 |  |
|------------|----|-------------------|--------------|--|
|            | 7  | DIV. PROJECT ENG. |              |  |

Sheet No. / of Z Sheets