Introduction to Power Systems Engineering Manual

1. General

1.1 This addendum is issued to change and/or supplement the information contained in BR 790-100-651. This is a merged Practice (MP), which provides standards for Southwestern Bell, Pacific Bell and Nevada Bell.

2. Responsibilities

2.1 Power engineering/planning responsibilities, for both Central Office and Remote Terminals, are to monitor, plan and deploy all DC and associated AC power equipment in the most cost effective and timely manner possible in order to support network elements.

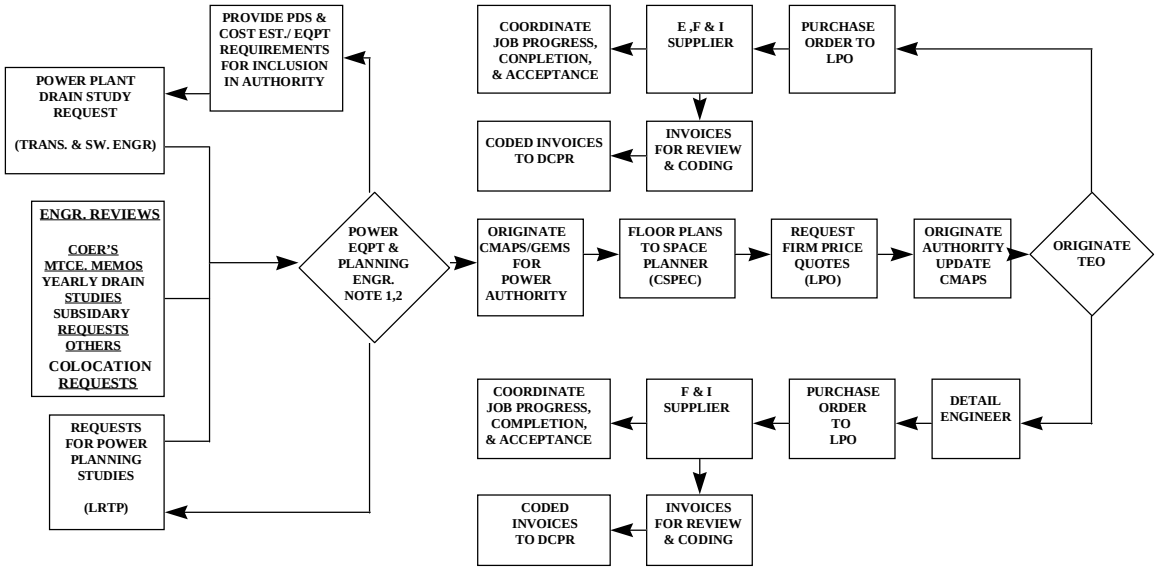
2.2 The process involves obtaining input from various sources/customers including Network Operations, Maintenance Engineers, Real Estate Management, Operations Systems Support, Network Distribution Services, Subsidiaries, and Centralized Staff.

2.3 Power engineering functions include the following:

A. Maintain the mechanized data base of all central office and RT power equipment.
B. Update power plant and standby plant loads.
C. Process power study requests and provide power data sheets.
D. Process requests from Maintenance Engineers. These may be submitted as Central Office Equipment Recommendations (COER) or Maintenance Requirements (MR).
E. Review grounding surveys and schedule updates if required.
F. Formulate recommendations and initiate budget and scheduling documents.
G. Request firm price quotes.
H. Issue authorizations.
I. Prepare Telephone Equipment Order
J. Code Supplier invoices for input to DCPR.
K. Coordinate job progress and completion.
L. Prepare cost estimates for Network Sales Support ,and Network Planning.
M. Analyze technical feasibility of proposed additions.
N. Provide technical support for Real Estate Management, NSS, LRPT, Network Operations, and Network Maintenance Engineering.
O. Assist in emergency situations to prevent service interruptions or in restoration of service.

2.4 Following is a process flow depicting the power engineering process for power planning and implementation from the origin of the inputs to the completion of the effort resulting from the various inputs.

POWER ENGINEERING PROCESS



NOTE 1. **INPUT DATA INTO ENGINEERING AND DATA BASE MANAGEMENT SYSTEM, DETERMINE EQUIPMENT REQUIREMENTS, ACCEPT OR REJECT COERS, EVALUATE MTCE MEMOS, INPUT YEARLY DRAIN STUDIES, & ISSUE AUTHORITIES OR PROVIDE INFORMATION TO TRANS./SW. ENGR.**

NOTE 2. **ANALYZE PROPOSED PROJECTS & PROVIDE COST ESTIMATES FOR THE MOST ECONOMICAL SOLUTION TO LRTP.**