



**CALCUTTA ELECTRIC SUPPLY
CORPORATION**

Highlights

Customer

Calcutta Electric Supply Corporation (CESC),
Calcutta, India

Source Platform

DG MVS 1500 with
AOS/VS II Operating System /
COBOL / Legacy Data Store
(Sequential & ISAM Files)

Application

High-Tension Billing

Size

COBOL Programs: 52
LOC: 45,000 approx
Files (Sequential & ISAM): 61
CLI Programs: 97
LOC: 3100
Size of Data: 70GB

Target Platform

SUN 4500/ Solaris with
ORACLE 8i, Oracle
Developer 2000 (Forms),
Oracle PRO*COBOL,
MF COBOL.

Team size

1 project manager with
2 team members and
1 Quality reviewer

Introduction

CESC is one of the largest Power Generation and Distribution Companies in the Eastern part of India.

Their High Tension Billing application resided on a DG MVS 15000 system using AOS / VS II Operating System.

This application was developed on COBOL with files, both sequential & ISAM, as the data store.

The DG system needed urgent replacement as it was ageing and there was no proper support. Since the applications were immensely rich in functionality and served the business objectives very well, it was planned not to replace the application but renovate and re-host it on to a new platform, preferably using a RDBMS on an open system platform.

Challenges

Since the application was mission-critical and dealt with realizing public money, accuracy of the bills being generated was of utmost importance. Technically, the challenge lay in transforming a flat file data model to a relational data model. Another issue was to restrict changes in the COBOL programs to a minimum, so that the embedded business logic remained unaffected.

Solution Approach

A tool based automated solution was used to transform the Legacy Data Store to Oracle RDBMS, the COBOL programs to MF COBOL, CLIs to Solaris SHELL Scripts.

Data migration utilities for downloading data from the DG system and uploading them on to the Oracle database were generated through the tool as well.

The solution achieved more than 90% automation level. The project along with archived data migration was completed in 5 months time.