

## **High-level breakdown analysis of the problem.**

The main purpose of this project is to establish a robust power service management system which can enable the common people to recover from the damage of hurricane or other natural calamities as soon as possible. The proposed system will effectively maintain the details about the damaged hubs in the province and allow their employees to manage easily as compared to manual system. In the development of system, various phases could be as follows:

### **1. Planning Phase.**

Details of work breakdown, drafting and documentation of basic plan of the project are done.

### **2. Requirement Collection.**

All software and hardware requirements are identified and collected in order to develop the system. Some of the important details like:

- Postal code data collection.
- Hub data analysis.
- Generate the repair logs.
- Details to be stored permanently in the database.

### **3. Design Phase.**

Actual implementation of the system is done in this phase. The functionalities mentioned in the requirement phase will be implemented and integrated to ensure that software runs properly according to the system requirements.

### **4. Testing Phase.**

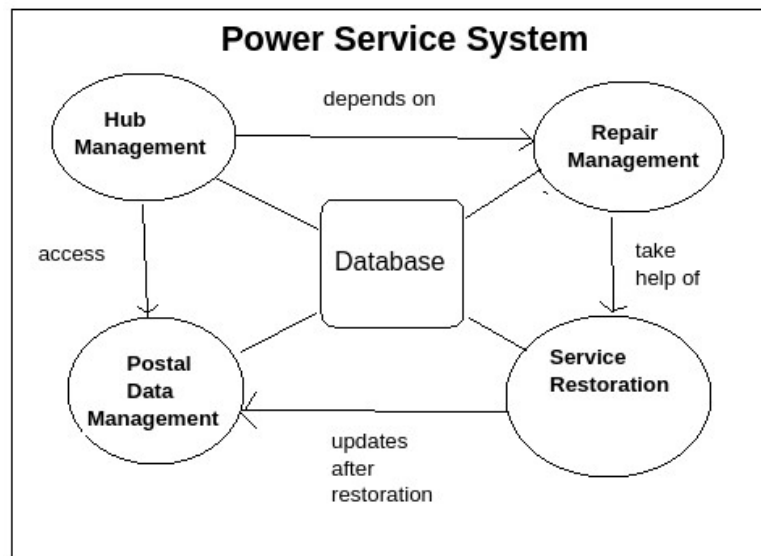
All different components are unit tested and verified for correctness. Each functionality will be black box tested followed by final integration testing.

## 5. Deployment and Maintenance.

In this final phase, the developed system will be put into deployment and the employees can utilise it to record the actual hub data and repair logs. Hence, the damaged hubs can be fixed quickly in such situations.

### System working:

The overall working of the system is illustrated in below figure. In power service management, there are four main systems which will handle the data flow and management of damage control and repairing services.



Hub management section will contain the details about a particular hub including co-ordinates, list of postal codes, time consumed for repair and others. In collaboration with repair management system, it will repair the damage. Repair management system will manipulate the details like number of employees engaged in repairing, time consumed, repairing date and other efficiency parameters. The overall view of the system is provided and the further development will be based on these details.