

ABSTRACT

Bandung District Government is a government institution responsible for handling all citizenship matters in Bandung Regency area. One of the government services to the people is to provide services in the field of communication and informatics. The agency responsible for this service is the agencies of Communications, Informatics and Statistics of Bandung Regency. Currently, the agency already has a data center that serves as a service provider in the field of communication and informatics located at the office building DISKOMINFO.

Based on the long-term future plans the data center will be developed both in infrastructure, hardware, and services provided. Therefore it takes a good plan to how much power will be used in the future and the appropriate electrical system. Needed design of data center power management in accordance with the power requirements in the data center. This design uses the PPDIOO Life-Cycle Approach method in the first three stages of prepare, plan, design and in accordance with TIA-942 standards. The use of this method fits with the development of data center Government of Bandung Regency that is sustainable with the optimization stage for long-term development of the data center.

The final result of this research is guideline of development of data center according to TIA-942 standard which divided into tiering level, it is known that power usage at tier 1 of 82954 watt require generator of 110 kVA, at tier 2 power usage of 111079 watt require generator of size 145 kVA, and at tier 3 the power usage of 136,309 watts requires a 175 kVA generator.

Keywords: Data center, PPDIOO Life-Cycle Approach, Standard TIA-942, Power Management.