



**NINTH REGULAR SESSION
FINANCE AND ADMINISTRATION COMMITTEE
Sixth Session
Manila, Philippines
01 - 06 December 2012**

Solar Power for WCPFC Headquarters

**WCPFC9-2012-FAC6-17 Rev 1
4 December 2012**

Introduction

1. The Commission headquarters spends roughly USD142,500 annually on electricity for the main headquarters building in Pohnpei. The building uses roughly 22,560 kilowatt Hours (kWh) per month at a cost of USD .527 per kWh. The Secretariat proposes that solar power be used to reduce future costs of the Commission's Headquarters.

Solar Power

2. As noted in the Headquarters Matter paper (WCPFC9-2012-FAC6-08), The cost per kWh have in increased by an average of 10.8% a year over the last 6 years in Pohnpei. Based on these costs as well as the cost of maintenance, the system would pay for itself within 4 years. The solar panels, which make up the vast majority if the cost of the system, have a 25-year lifespan if maintained properly.

3. It is proposed that a two-step process be considered for the installation of a solar system. First, a 20-kilowatt peak (kWp) grid-connected solar system would be installed. The system would cost around USD60,000. It is estimated that the system would produce between 2,480 kWh to 2,790 kWh per month. This would offset the monthly electricity bill by around USD1,300 at the current cost of electricity in Pohnpei. The annual maintenance contract for a 20-kilowatt peak system is USD1,800.

4. If the system works as expected, the second phase of the project would be to install an additional 80 to 100 kWp grid-connected system. As the initial 20 kWp system in phase 1 is scalable, the money spent on phase one would not be wasted on the project being split into two phases. The cost of phase 2 would be between USD240,000 and USD300,000. With the addition of 80 to 100 kWp, the system will produce more power than needed by the headquarters building during the day. Pohnpei has recently implemented a system that will allow for the buy-back of additional power generated by alternative energy. Power produced above the needs of the office can offset cost of power used when the solar system is not available.

Funding Options

5. It is estimated that the 2102 Commission budget will be underspent by roughly USD350,000 (WCPFC9-2012-FAC6-12 Rev 1). Part of these savings could be used to fund phase 1 of the project. The results of implementing phase 1 would be reported to the FAC and a decision on proposed funding phase 2 of the project would be considered at FAC7. For the implementation of Phase 2, the Secretariat can look for external funding sources.

Recommendation

6. The Committee is invited to:

- a. note the proposal and make a recommendation to the Commission.