

Chapter 4

Conclusion

The attempt by the researcher to study economics of SEA when reaching for 2015 Renewable Electricity Generation endeavor, has been materialized in this dissertation. The researcher did extensive literature review, including past research reports and interviewing with stake holders in the industry on the topic. In a nutshell, this study include scrutinizing of present avoid cost tariff calculation methodology for renewable electricity generation, forecasting possible combination of renewable resources to reach National Energy Policy endeavor on renewable electricity generation based on available LGEPs, forecasting of avoided cost tariff based on LGEP's generator plant's dispatching schedules after improving present tariff calculation methodology on constant terms, forecasting additional funding requirements for new SEA tariff on constant terms and scenario study with different fuel prices and LGEPs.



University of Moratuwa, Sri Lanka.
Electronic Theses & Dissertations

Due to a lot of unpredictable variable in the tariff calculation, this study was done under constant terms. Therefore, during study period it is considered fixed exchange rate, 0% inflation rate and fixed fuel prices. However, scenario studies have been conducted under different dispatching schedules and fuel prices to get a better understand on those variables on final result.

As per the scrutinizing of present CEB avoided cost calculation methodology, it has been found several modifications has to be done to the calculation to reflect the more realistic avoided cost of CEB as per SPPA guidelines. When forecasting avoided cost, modified avoided cost calculation methodology has been used to reduce the inaccuracies involve in present calculations.

This study can be used as a tool to further improve the present avoided cost tariff calculations to reflect more accurate avoided cost and thereby reduce SEA's tariff commitments, can use for policy makers to get an understanding of SEA's cash flow requirements to meet tariff commitments as per new SEA's tariff when reaching year 2015

renewable generation endeavor and to identify the correlation between SEA's return on tariff investment and oil prices.

4.1 Recommendations for Future

Overall the researcher feels he has delivered a reasonable research out come to study the economics of SEA's investment on tariff to reach renewable target. However this study can be improved in following areas.

This study is basically based on the dispatch schedules and demand forecasts available in 2005 and 2008 LGEPs. However as per the recent past actual data, it is evident that the present actual demand is fairly less than the demand predicted in the forecast, thus this directly affect the required renewable contribution to reach the envisaged value and overall SEA's tariff commitments. Also when calculating avoided cost due to renewable, dispatch schedules need to be prepared without taking renewable contribution into account to avoid underestimating of avoided cost as discussed in chapter 2. However in 2008 LGEP, dispatch schedules are prepared by taking renewable contribution into account. Therefore, overall result will be more accurate by using more up to date forecasts and dispatch schedules without renewable.

Also more scenario studies can be done for different possible combinations of renewable sources to reach the target to have better view of SEA's tariff investment under different circumstances.