RISK MANAGEMENT PROCESS FOR POWER GENERATION PROJECTS IN SRI LANKA

BY

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Abstract

Risk management helps potential obstacles to be identified and contained early through proper response strategies, thereby minimizing negative impacts on positive aspects on project cost, schedule, scope and quality. Managing potential risks also helps identify opportunities that may enhance the project and have a positive impact on project objectives.

The initial surveys carried out by the author revealed that neither the main power utility in Sri Lanka, the Ceylon Electricity Board nor any of the Independent Power Produces operating in the country either possess or practice any documented, structured Risk Management Process for power generation projects. Therefore, there is a great requirement to develop an appropriate Risk Management Process for Sri Lankan power generation projects.

The main scope of this research is to formulate a Risk Management Process for Power Generation Projects (RMPPGP), taking in to account the current risk management context of the country. In the thesis, the author has proposed an RMPPGP consisting of six sub-process i.e Establishment of the risk management context of the Power Project, Risk identification, Risk analysis , Risk response planning, Risk monitoring & control and Communicate &consult. Comprehensive flow charts for each of these sub-processes and also the required supporting material of the RMPPGP have also been presented for convenient practice.

DECLARATION

I certify that except due acknowledgement has been made, the work is that of the author alone, the work has not been submitted previously, in whole in part, to qualify for any other academic award in any institution.

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

ACRONYMS

APM	Association for Project Management , UK
BOT	Built Operate and Transfer
C	Constructability
CPM	Critical Path Method
EIA	Environmental Impact Assessment
EPC	Engineering, Procurement and Construction
EIA	Environmental Impact Assessment
IRM	Institute of Risk Management , UK
M	Maintainability
NPV	Net Present Value
O	Operability
PMI	Project Management Institute
PERT	Programme Evaluation & Review Technique
PM	Project Manager
PMBOK	Project Management Body of Knowledge (published by PMI)
RO	Risk Owner
RBM	Risk Breakdown Matrix
RBS	Risk Breakdown Structure
REB	Risk Evaluation Board
RM	Risk Manager
RMP	Risk Management Process
RMPPGP	Risk Management Process for Power Generation Projects
SME	Subject Matter Expert
WBS	Work Breakdown Structure