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RISK (THREAT & OPPORTUNITY) MANAGEMENT – ELECTRICITY ALLIANCE

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PURPOSE AND SCOPE

The purpose of this document is to define the minimum risk (threat and opportunity) management requirements to be implemented by each of the Area Electricity Alliances in a Risk (Threat and Opportunity) Management Process.

The objectives of this document are to:

- Define the context and boundaries of the risk management system, including key objectives and review processes;
- Clarify the roles of individuals within the process including responsibilities, authority and lines of reporting for risk management activities;
- Outline the risk management process to improve understanding of the methodologies and processes to be used;
- Maintain consistency in assessing and reporting risk;
- To integrate into the existing TP146 investment process throughout all stages of delivery;
- Ensure a clear understanding of the terms used in risk management.

PART 1 – PROCEDURAL

1 RESPONSIBILITIES

1.1 The Employer

The Employer shall:

- a) Support the Risk (Threat and Opportunity) Management Process, providing sufficient resource with suitable delegated authority;

- b) Provide to the Alliance at the Development Phase inaugural scheme team meeting, the IP1 document and supporting information;
- c) Attend/facilitate the Risk User Group (RUG) meeting to share common information and techniques, and encourage continuous improvement to develop best practice;
- d) Attend, participate and contribute at project risk management workshop(s), particularly at the pre-IP3 target cost reviews;
- e) Communicate across all Alliances, as appropriate, the Risk (Threat and Opportunity) Management Process;
- f) Inform the Alliance of any foreseeable risks that the Employer is made aware of (via an Early Warning Notice) that have to be considered as an exposure to either party;

1.2 The Alliance

The Regional Electricity Alliance shall:

- a) Implement the requirements of this Transmission Procedure (TP194A);
- b) Appoint suitably qualified and experienced personnel to undertake roles relating to risk management;
- c) Develop, implement and maintain an individual detailed Alliance Risk (Threat and Opportunity) Management Plan (RMP) which creates a robust and auditable risk management process. Continually improve the risk and opportunity management process. Ensure that the risk management process continues to be effective and appropriately applied through ongoing audits;
- d) Attend the Risk User Group (RUG) meeting to share common information, techniques and best practice and deliver continuous improvement;
- e) Manage and monitor the Risk Management Process for Alliance, Employers, programme and project risks, minimising exposure where possible and escalating issues to the Employer where appropriate;
- f) Inform the Employer of any foreseeable risks that the Alliance is made aware of (via an Early Warning Notice) that have to be considered as an exposure to either party;
- g) Provide an auditable system that can control and record the risk management information and data.

Where there is more than one Area Electricity Alliance engaged in the delivery of a single project, the Lead Alliance shall coordinate the individual risk registers; the other Alliances shall support the Lead Alliance in order to achieve the above objectives and deliverables.

2 RISK (THREAT & OPPORTUNITY) MANAGEMENT PROCESS

2.1 The Risk Management Process

The key to successful holistic risk and schedule analysis is feeding back information from site and learning past lessons. Schedules should become more realistic with feedback of actual data being key to the improvement of reducing uncertainty and increasing confidence levels.

The basis steps of the Risk Management Process are tabled below. This process applies to management of both Project Risk and Programme Risk. The tools and techniques used will be detailed in Regional Alliance Risk Management Plans.

2.1.1 Identification

Risk will be identified at Workshops attended by key project members and stakeholders. The data will be retained in the Risk Register.

2.1.2 Assessment

The project's top risks are determined by ranking using the P&I grid in Appendix A, Table 9.

2.1.3 Planning

A review of how best to treat the risk using the standard risk response strategies in Section 3.5

2.1.4 Analysis

Monte Carlo analysis will be used to support the risk contingency identified in the Target Cost. Where possible, data used in the analysis model will be backed up by calculation or supporting statements.

2.1.5 Management

Implement actions, report status, maintain Risk Register, audit process.

2.2 Schedule Risk Analysis

Schedule risk analysis provides a holistic approach to building confidence in delivering programmes of work.

Undertaking an assessment of the levels of uncertainty in the schedule durations connected to the risks held on the risk register, an overall picture can be formulated about the likelihood of project duration success.

2.3 Risk Categories

Risks for the Electricity Alliance Workorder are separated into four categories: Employer's Risk; Project Risks; Annual Programme Risks and Opportunities, and; Strategic Risk.

2.3.1 Strategic Risks

Strategic Risks are risks which could impact on the Area Alliance operating as a business (looking outwards from the business). These have an influence on the AAA contract but are created from external influences to the contract or the Employer. These risks are managed at a corporate level in the corporate risk management processes of the individual Alliance Partners.

2.3.2 Annual Programme Risks

Annual Programme Risks are common across projects or prevent the Area Alliance from operating its core business of project delivery (looking inwards at the business). The Regional Alliance shall manage and monitor all Annual Programme Risks.

2.3.3 Project Risks

Project Risks have specific impacts on a single project and shall be managed throughout the TP146 lifecycle by the Area Alliance.

2.3.4 Employer's Risks

The Employer Risks are set out in the Schedule of Employers Risks and the AAA Clause 80.1. These are risks that are not priced for in the Agreed Target Cost and exposure is addressed by the Employer.

The Alliances are responsible for monitoring and supporting the Employer in the management of these risks, mitigating and reducing exposure where possible and escalating to the Employer where appropriate.

2.4 Annual Programme Risk Identification

2.4.1 Annual Programme Risk Identification

The Alliance is responsible for identifying and capturing the risk in a uniform manner and in line with the agreed pan-alliance approach.

The deliverable to the Employer from the Alliance prior to the issue of the new years Workorder is a financial exposure (equivalent to a Monte Carlo P(50) level).

The Employer may reduce the amount of risk information for scheme development prior to sanction if they believe that it is not required.

2.5 Project Risk Identification

2.5.1 Investment Planning & Definition Phase

The Employer (Asset Management) is responsible for undertaking optioneering, selecting a preferred option and identifying high-level risks and opportunities at this stage of scheme development. If there are sub-categories within an individual scheme, e.g. connection and infrastructure assets, or capital and operational expenditure, required to deliver the same objective, this will be identified by the Scheme Team Leader at the Investment Definition Phase. This is required so that risk quantification can be attached to the correct part of the Scheme Sub-Category and monitored throughout the life of the project.

2.5.2 Development Phase

The risk management process in the Development Phase is led by the Employer's Scheme Team Leader as part of the scheme team process.

The preliminary information developed by the Employer in the Investment Planning and Definition Phase shall be passed on to the Lead Alliance by the Employer at the inaugural scheme team meeting. This will be in the form of the Scheme Brief Notice and supporting information, which includes details of works to be done and complexity factors. Overall scheme risks and the elements (or sub-categories) to which they relate will also be listed in this document.

The Alliance will work with the Employer to review the risks for each of the options under review. The Lead Alliance shall involve the Scheme Team Leader in the creation of a risk register per Scheme Sub-Category for the selected scheme option to be sanctioned.

During this stage, risk management shall be undertaken to mitigate scheme risks. The Lead Alliance is responsible for providing a means of capturing the results of risk identification at this stage in a uniform manner and in line with the agreed pan-alliance approach.

At this stage a risk register is produced with cost and time impact durations for the total project (all schemes and sub categories). The Alliance shall develop a schedule including individual duration uncertainties. These shall be applied to the schedule tasks, (optimistic and pessimistic durations of 90% likely and +120% likely respectively).

The basic risk information to capture depends on the maturity of the project development and should be at minimum as described in Table 1.

Data Requirement	Additional Guidance
Risk Name	A short identifying name for each risk is required and shall be used consistently if the risk is repeated elsewhere
Risk Description	Each identified risk should be a risk to meeting one of the programme or project's main objectives; the risk description should explicitly consider the causes and consequences of the risk
Risk Owner	Named individuals responsible for managing risks on a day-to-day level in line with relevant processes and procedures
Cause(s)	Events or failures in control that could trigger the risk
Consequence(s)	Outcomes that help to articulate and score; the financial, time, reputation and possibly performance impact
Risk Assessment	A qualitative assessment of the current impact and likelihood of a risk occurring in the absence of specific risk controls.
Risk Value (Time)	A quantitative assessment of pre-mitigation, minimum, likely and maximum completion dates
Risk Value (Cost)	A quantitative assessment of pre-mitigation, minimum, likely and maximum cost values.

Table 1 – Basic Risk Information Requirements Development Stage

The deliverable to the Employer from the Lead Alliance at the end of this process is a “Most Likely” financial exposure (equivalent to a Monte Carlo P(50) level), with a range of likely minimum and maximum exposures (Monte Carlo P(20) to P(80)). The deliverable to the Employer from the Lead Alliance in contexts of a schedule shall be a P(80) confidence of completion taking into account the schedule uncertainty and impact durations of the risks on the risk register. These will be based on a preliminary design that has been broadly agreed to be deliverable, and will be agreed with the Employer.

The Employer may reduce the amount of risk information for scheme development prior to sanction if they believe that it is not required.

2.5.3 Project Design Phase

The risk and opportunity management process in the Project Design Phase is led by the Lead Alliance. A risk register will be developed for each Scheme Sub-Category of the scheme by the Lead Alliance. The Lead Alliance shall involve the Scheme Team Leader in the development of this register. This will be reviewed for completeness and for quality of estimates of both probability and impact with the Employer and agreed prior to use in preparing costs at IP3.

During this stage, risk and opportunity management shall be continuously undertaken to minimise scheme risks and gain advantage from any opportunities.