



Risk Management Policy, UPCL

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1. Background

Incorporated under the Companies Act, 1956, on 12-02-2001, Uttarakhand Power Corporation Limited ("**UPCL**" or "**the Company**") stands as a vital Government of Uttarakhand Undertaking and the exclusive electricity distribution licensee for the state. With a rich history stemming from the trifurcation of the erstwhile U.P. State Electricity Board (UPSEB) following the U.P. Electricity Reforms Act, 1999, UPCL was initially entrusted with both transmission and distribution responsibilities. However, in adherence to the mandates of the Electricity Act, 2003, the transmission business was later transferred to the newly formed "Power Transmission Corporation of Uttarakhand Limited" from 01-06-2004. Since then, UPCL has assumed the pivotal role of the sole distribution licensee for electricity in the state. UPCL is committed to supplying quality, reliable and affordable power to its 2.6 million consumers across Uttarakhand.

In the dynamic landscape of power distribution, it is essential to have a robust Risk Management Policy for Distribution Companies (DISCOMs) like UPCL. DISCOMs operate within an intricate ecosystem characterized by evolving regulatory frameworks, technological advancements, and external market dynamics. A well-defined risk management policy becomes indispensable to anticipate, evaluate, and mitigate potential challenges, ensuring the continuity of power supply and safeguarding the interests of consumers as well as that of the Company.

In recognition of the intricate challenges inherent in the power distribution sector, UPCL acknowledges the necessity for a comprehensive Risk Management Policy. It is imperative for the company to adopt a proactive stance toward early identification and sustainable mitigation of potential risks. This commitment is underscored by the realization that a robust risk management policy is not only a strategic imperative but also a legal requirement mandated by Section 134(3)(n) of the Companies Act 2013.

The Companies Act 2013 necessitates the inclusion of a statement in the Board of Directors' report, indicating the development and implementation of a risk management policy. This policy should encompass the identification of elements of risk that, in the opinion of the Board, may pose a threat to the existence of the company. In compliance with this statutory requirement, UPCL has formulated the Risk Management Policy.

2. Vision Statement & Key Objectives of the Policy

Vision Statement for the Policy

"To create a resilient and secure power corporation through proactive risk identification, mitigation and management, ensuring reliable service and operational efficiency."

The Risk Management Policy of the company is designed with the following key objectives in mind:

- 1. Proactive Risk Identification:** The policy seeks to establish a proactive framework for the early identification of potential risks across various facets of the UPCL's operations. This includes but is not limited to regulatory changes, technological disruptions, market fluctuations, and external environmental factors.
- 2. Comprehensive Risk Assessment:** the company aims to conduct thorough and systematic assessments of identified risks, evaluating their potential impact on the organization's strategic objectives, financial stability, and operational efficiency. This includes a nuanced understanding of both internal and external risk factors.
- 3. Effective Risk Mitigation Strategies:** The policy endeavors to formulate and implement sustainable risk mitigation strategies. By developing targeted measures and contingency plans, the company aims to minimize the likelihood and impact of identified risks, ensuring resilience in the face of uncertainties.
- 4. Compliance with Regulatory Mandates:** The policy is structured to align with the statutory requirements outlined in Section 134(3)(n) of the Companies Act 2013. By adhering to regulatory mandates, the company not only meets legal obligations but also fosters a culture of transparency and accountability.
- 5. Continuous Improvement:** The policy underscores the UPCL's commitment to a culture of continuous improvement. By regularly reviewing and updating risk management processes, the organization

aims to stay adaptive and responsive to emerging challenges in the dynamic energy distribution landscape.

The aforementioned objectives collectively define the strategic direction of the UPCL's Risk Management Policy, reinforcing the UPCL's dedication to proactive risk management and the delivery of reliable electricity services.

3. Scope and Applicability of the Policy

The Risk Management Policy of the company has been meticulously crafted with due consideration to the UPCL's current corporate profile, existing services, and future growth plans. Aligned with industry standards and best practices, the policy is designed not only to safeguard the interests of shareholders but also to ensure business continuity in the face of potential risks and challenges. The scope and applicability of this policy are defined as follows:

Corporate Profile and Services: The policy takes into account the company's current corporate identity, the spectrum of services it provides, and its envisioned growth trajectory. This ensures that risk management strategies are tailored to the specific requisites of the company's operations.

Industry Standards and Practices: In its aspiration to achieve best in class industry standards and practices, the policy sets the benchmark for proactive risk management, thereby enhancing the company's resilience within the sector.

Business Continuity Focus: With a primary objective of ensuring business continuity, the policy extends its coverage to all activities and events that have the potential to impact the UPCL's business operations. This includes a comprehensive approach to risk identification, assessment, and mitigation.

Integration with Other Policies: The Risk Management Policy operates in conjunction with other existing policies such as HR Policy, Commercial Policy, Procurement Policy, Financial Management Policy, Bad & Doubtful debt policy, Regulatory Compliance Policy and all other related policies within the UPCL, both operational or administrative in nature. This collaborative approach ensures a seamless integration of risk management principles with broader organizational frameworks.

Company-Wide Applicability: The policy is applicable across the entire organizational spectrum, encompassing the Corporate Office, Site Offices, operational and under-construction assets, and any other entity that significantly influences the business operations of the company.

4. General Principles of Risk Management

The Risk Management Policy of the company is guided by the following overarching principles; ensuring a structured and comprehensive approach towards risk identification, assessment, and mitigation:

Integration into Organizational Activities: Risk management is mainstreamed as an integral part of all organizational activities, aligning with UPCL's commitment to embedding a culture of risk-awareness across the company.

Structured and Comprehensive Approach: The risk management exercise is structured and comprehensive, contributing directly to organizational results such as service efficiency, commercial parameters optimization and operational efficiency, ensure safety measures etc. This approach ensures a thorough understanding of risks and their potential impact on UPCL's operations.

Participatory Employee Involvement: All employees are integral to the risk management exercise and share the responsibility to identify, evaluate, and manage risks. This participative approach fosters a collective commitment towards risk awareness and mitigation, resulting in achievement of desired objectives.

Continuous and Iterative Process: Risk management is recognized as a continuous and iterative process rather than a one-time exercise. The effectiveness of this approach allows the company to anticipate future risks and respond effectively to the changing and dynamic challenges.

Alignment with Corporate Objectives: The risk management activity is closely aligned with UPCL's corporate objectives, policies, and priorities. It draws on historical and current information while considering future expectations, ensuring relevance to the UPCL's strategic direction.

Integral to Decision-Making: The risk management exercise is an integral part of UPCL's decision-making processes, contributing valuable

insights and considerations to enhance the quality and resilience of strategic decisions.

Regular Review of Risk Tolerance Levels: Risk tolerance levels are subject to regular reviews and adjustments based on changes in the UPCL's strategy. This proactive approach ensures that risk management remains aligned with the evolving goals and priorities of UPCL.

Prompt Reporting and Action: The occurrence, progress, and status of all risks are promptly reported, facilitating swift and informed decision-making. Appropriate actions are taken to address identified risks, ensuring a proactive stance in managing potential challenges.

5. Definitions

The common terminologies used in the Risk Management Policy are as follows:

Table 1: List of Definitions

Terminology	Definition
Audit Committee	Committee constituted in compliance with Section 177 of Companies Act 2013
Commercial Risk	Risk involving potential financial loss or service disruption due to factors like revenue collection issues, high distribution losses, power theft, meter damage, meter reading, Meter management etc. and issues related to contract disputes etc. affecting the utility's financial health.
Compliance Risk	Risk arising out of non-compliance with non-fulfilment of legal, regulatory and statutory requirements
Cyber Security/ Technology Risk	Risk associated with potential breaches in information security, including unauthorized access to systems and data, which could lead to operational disruption, financial loss, and reputational damage.
Environmental/ Natural calamity Risk	The potential for damage or disruption to electrical infrastructure caused by environmental conditions or natural disasters, including pollution, climate change, earthquakes, floods, and wildfires etc.
Financial Risk	Risk affecting the cash-flows, borrowings, balance sheet and fund management.
HR/Manpower Risk	Risk arising from challenges related to recruitment, retention, manpower shortages, and employee management, succession planning etc. which can affect organizational performance, compliance with labor laws, and the safety of employees working on-site.
Operational Risk	Risk arising from day-to-day operational vulnerabilities, people and information systems

Terminology	Definition
Policy Risk	The potential for adverse impacts due to changes or uncertainties in Govt. policies, regulations, or laws.
Power security & Resource Adequacy Risk	Risk related to the ability to consistently meet electricity demand, ensuring reliable power supply, and having sufficient generation resources. This includes risks from supply shortages, grid instability, or adequacy of infrastructure, which can lead to power outages or inability to meet future energy needs.
Project Risk	Risk associated with potential delays, cost overruns, scope changes, or failures in delivering projects on time and within budget, which can impact the overall functioning and objectives of the project.
Purchase and Inventory Risk	Risk related to procurement and inventory issues, such as supply chain disruptions, inaccurate stock levels, and price fluctuations, affecting operations and costs.
Regulatory and Compliance Risk	Risk resulting from compliance obligations, changes in laws, regulations, or industry standards/Discom ratings that directly or indirectly impacts financial position and financial stability of Discom.
Reporting Risk	Risk arising from inaccuracies or delays in financial reporting due to inadequate legacy data and insufficient reporting mechanisms, leading to audit concerns, regulatory violations, and financial mis-reporting.
Risk	Risk is the effect of uncertainty on objectives. It is expressed as a combination of the probability of an event and its impact. Events with a negative impact represent risks, which can prevent value or erode existing value.
Risk Appetite	The maximum quantum of risk which the company is willing take as determined from time to time in accordance with the Risk Strategy of the Company.
Risk Assessment	Risk Assessment is defined as the overall process of risk analysis and evaluation.

Terminology	Definition
Risk Criteria	Terms of reference against which the risk is to be evaluated
Risk Description	A Risk Description is a comprehensive collection of information about a particular risk recorded in structured manner.
Risk Identification	Defines the 'risk' by providing insight into the uncertainty that may be experienced
Risk Management	Co-ordinated activities required to direct and control the organization with regards to an anticipated risk
Risk Register	A 'Risk Register' is a tool for recording the risks encountered at various locations and levels in a standardized format of Risk Description. (Annexure-2)
Risk Strategy	The Risk Strategy of a company defines the company's considered response towards dealing with various risks associated with the business. It includes the company's decision on the risk tolerance levels, and acceptance, avoidance or transfer of risks faced by the company.
Safety/Security Risk	The potential for harm to employees, assets, or operations, equipment theft, or security breaches.

6. Risk Management Process

This section describes the procedure for identification, evaluation and treatment of risk.

The risk management process at UPCL is a dynamic and continuous endeavor encompassing the systematic identification, assessment, mitigation, and monitoring of risk issues across the organization. Developed in line with industry best practices and guiding principles, the risk framework ensures consistent and effective approach, drawing from the wealth of experience and success observed in various leading organizations. The risk management process is structured to provide a comprehensive and adaptable framework that proactively addresses uncertainties and safeguards UPCL's operational integrity and strategic objectives. This process is depicted hereunder:



Figure 1: Risk Management Process

6.1. Establishing the Context

Establishing the context within the Risk Management Framework of UPCL involves a meticulous examination and in depth understanding of various factors that could give rise to risks impacting the organization's functioning. Risks may emanate from a diverse range of external factors, including Social, Political, Legal, Regulatory, Financial, Technological, Economic, Environmental, dynamic Power Markets etc. Simultaneously, internal factors related to operations, decision-making processes, and potential delays etc. may exhibit interdependencies and interconnections with the external environment, thereby posing risks to the organization. This comprehensive understanding of all such factors forms the cornerstone for effective risk identification, assessment, and mitigation strategies within UPCL's risk management practices.

6.2. Process of Risk Identification

This section outlines the essential aspects and procedures for identifying potential risks in the power distribution sector, focusing on those that could have tangible or intangible impacts on the Discoms. Risk identification within the risk management framework of UPCL serves the vital purpose of systematically finding, recognizing, and describing potential risks that could impact the achievement of organization's objectives. This crucial step involves utilizing various methods to pinpoint specific risks that may affect UPCL's ability to achieve its goals. The policy outlines the following standard steps for risk identification, which may be adjusted as needed based on business practices and are not limited to these alone.

- A. Brainstorming:** Engaging in collective brainstorming sessions to tap into the diverse perspectives and insights of team members, fostering a creative environment for identifying potential risks.
- B. Surveys, Interviews, and Working Groups:** Employing structured surveys, interviews, and collaborative working groups to gather

valuable input from internal teams, enhancing the depth of risk identification.

C. Documented Knowledge: Drawing upon documented knowledge from established industry practices to identify risks based on historical learnings.

D. Events Occurred: Analyzing past events, incidents, and near-misses to identify potential risks and vulnerabilities, enabling a proactive approach to risk mitigation.

This multi-faceted approach to risk identification ensures a comprehensive understanding of potential risks, empowering UPCL to develop targeted risk management strategies that align with its organizational objectives.

6.3. Risk Analysis

Risk analysis within UPCL is a critical process aimed at realizing the nature and characteristics of risks while quantifying their potential impact. This analytical approach involves understanding the likelihood of the occurrence of an event and assessing the probable impact it could have on the business. The risk analysis serves two key objectives: -

Understanding the Nature of Risk: The analysis seeks to comprehend the intrinsic nature and characteristics of identified risks, providing insights into their dynamics and potential implications.

Quantifying the Level of Risk: Through a systematic approach, risk analysis aims to appropriately quantify the impact of risk, allowing UPCL to prioritize and address risks based on their potential severity.

UPCL has established a two-fold criteria for identifying risks, focusing on the following factors:

a. Likelihood of Occurrence of a Risk Event: The term "Occurrence" refers to the probability of a risk event actually happening. This probability can be objectively defined, measured, and can be

expressed qualitatively and/or quantitatively. Probability factors are assigned to the risks based on the following guidelines:

- **Risks with Precedence in UPCL:** Actuals are considered as the baseline impact for risks that have precedence within UPCL.
- **Risks with No Precedence in UPCL but Prevalent in Industry:** Probability factors are determined based on secondary research for risks with no precedence in UPCL but prevalent in the industry.
- **General Risk:** Likelihood of occurrence and potential impact on Business/Operations are considered for risks categorized as general.

To evaluate the likelihood of the risk, any of the following/combination of the parameters from the following scale maybe used:

Table 2: Likelihood Criteria of Occurrence of Risk Definitions

Likelihood	Occurrence
1- Rare	Risk may occur once in over 3 years
2- Less Likely	Risk may occur once in 1-3 Years
3- Possible	Risk may occur once in a span of 12 months
4- Likely	Risk may occur once in a span of 6 months
5- Almost Certain	Risk may occur multiple times or more frequently

b. Magnitude of impact if risk event occurs:

The magnitude of impact pertains to the span or seriousness of the outcomes that may transpire in the event of a risk occurrence. It signifies the scope or strength of the repercussions stemming from the actualization of risk. When evaluating the impact of risk, a comprehensive examination of the impact has been conducted across various parameters to ensure that the assessment encompasses a broad spectrum of.

The Parameters considered are:

- Financial / Monetary impact

- Non-financial impact such as health & safety, Operation disruption / delay in work execution / project delays etc.

Table 3: Impact of Risk

Impact	Financial / Monetary	Others		
	Revenue Loss Bracket*	Environment, Health & Safety	Project delays/ work execution delays	Disruption of Supply#
1- Marginal	<0.25%	Medical treatment / restricted workday case	Upto 15 day	Upto 30 min
2- Minor	0.25% to 1.00%	Minor injury(s) causing loss of workdays	16-45 days	30 min-3 hours
3- Moderate	1.00% to 2.50%	Major Injury to worker / Third Party, but non-fatal	46-90 Days	3-12 hours
4- Significant	2.50% to 5.00%	1. Single Worker / Third Party fatality 2. Multiple Instances of major injuries	91-120 days	12-24 hours
5- Major	>5%	Multiple Worker / Third Party fatalities	> 120 days	> 24 hours

*Revenue loss, as shown in the table above, is to be calculated by multiplying the loss bracket with the Average of last 3 years Gross Margin available, i.e. (Average of Gross revenue from sale of power minus gross cost of purchase of power of last 3 years), as outlined in the balance sheet.

Disruption of supply refers to interruptions occurring in the electricity distribution network for 11kV feeders and higher voltage levels, affecting multiple consumers simultaneously over a continuous stretch.

6.4. Risk Evaluation

Risk evaluation involves the integration of scoring, classification, and assessment based on the likelihood and impact on the business. This process categorizes the scores into buckets according to the severity of the risk, distinguishing between High Risk, Medium Risk, and Low Risk.

For each of the risks analyzed on the basis of likelihood and impact, a combined score would be determined based on Table 2 and Table 3. The score would be determined as follows:

Table 4: Illustration of Combined Risk Score

Risk	Likelihood (A)	Impact (B)	Combined Score (C = A * B)
Risk A	1	2	2
Risk B	3	4	12
Risk C	3	3	9

The risk would be classified into one of the three zones based on the combined score. The details are as follows:

- a. Critical/High:** Risks within the red zone are high and would be considered as Critical/High or unacceptable. Such risks would require immediate senior management intervention in order to initiate mitigation plans. Risk within the red zones are categories as “Risk That Matter” (Rating >12)
- b. Medium:** Risks within the yellow zone indicate that the risk moderate and would require intervention of functional heads (Between 8 to 12)
- c. Low:** - Risks within the green zone indicate that the risk is low and can be carried out using routine procedures (Less than 8)

Basis the above, the overall risk classification is shown in the matrix below, known as heat map, which indicates the Risk Zone (High / Medium / Low):

		Impact				
		1- Marginal	2- Minor	3- Moderate	4- Significant	5- Major
Likelihood	1- Rare	Low (1)	Low (2)	Low (3)	Low (4)	Low (5)
	2- Less Likely	Low (2)	Low (4)	Low (6)	Medium (8)	Medium (10)
	3- Possible	Low (3)	Low (6)	Medium (9)	Medium (12)	High (15)
	4- Likely	Low (4)	Medium (8)	Medium (12)	High (16)	High (20)
	5- Almost Certain	Low (5)	Medium (10)	High (15)	High (20)	High (25)

Figure 2: Heat Map indicating the risk zone

6.5. Risk Treatment

Choosing a risk treatment option requires a thoughtful balance, considering the potential benefits that stem from adopting a comprehensive strategy for mitigations, taking into consideration the risk appetite of the company. This is an iterative process comprising of following:

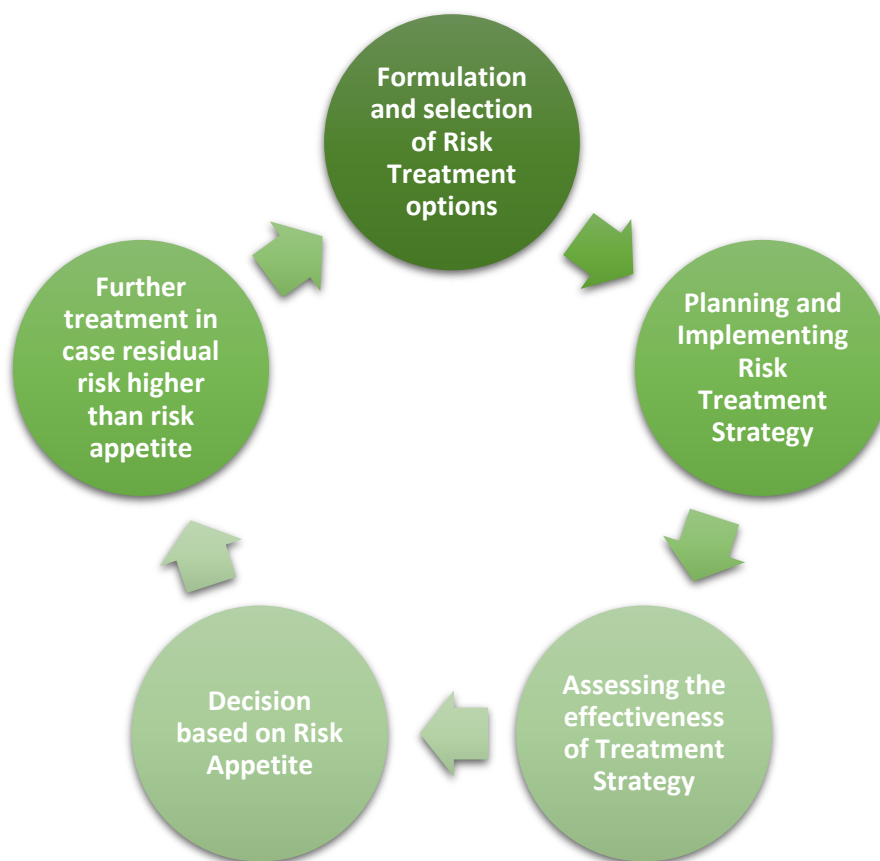


Figure 3: Risk Treatment Process

Generally, 4 broad risk strategies are commonly employed for mitigating risks. These strategies are not inherently mutually exclusive, and certain incidents may necessitate a combination of these approaches. These strategies are illustrated as follows:

i. Avoidance:

Definition: This strategy involves refraining from performing an activity that could carry a risk or altering the approach to eliminate the risk.

Applicability: Particularly useful in mitigating, project risks, or customer risks.

ii. Risk Transfer:

Definition: This strategy involves shifting some aspects of the risk to a third party.

Considerations:

- Internal processes of the company for managing and mitigating the risk.
- Conducting a cost-benefit analysis to assess the viability of transferring the risk to a third party.

Applicability: Widely utilized for mitigating financial risks or risks related to capital equipment.

iii. Risk Reduction:

Definition: This strategy entails continuing the activity while implementing methods or solutions to bring the risk to acceptable levels.

Implementation Methods:

- Containment Actions: Initiated before the materialization of the risk.
- Contingent Actions: Initiated after the materialization of the risk.

iv. Risk Retention:

Definition: This strategy involves accepting the possibility of consequences that may occur due to an anticipated risk.

Applicability:

- Events that cannot be mitigated cost-effectively.
- Uncontrollable events.

The framework is illustrated below:



Figure 4: Risk Treatment Strategy

7. Risk Matrix

To facilitate understanding of the policy processes, a range of prototype potential risks is outlined in the risk matrix for reference. This matrix can be used to translate policy into real-time risk identification for the distribution business, referred as **Annexure - 1**. The risk matrix provides a visual representation of identified risks, considering both the likelihood of occurrence and the magnitude of their potential impact along with the mitigation plan and responsibility. This matrix serves as a valuable tool for UPCL to prioritize and categorize risks according to their severity and potential consequences. Each identified risk is plotted within the matrix, allowing for a clear visualization of their relative importance. This aids in the formulation of targeted risk treatment strategies and ensures that resources are allocated effectively to address the most critical risks.

Table 5: Sample Risk Matrix

S. No	Risk Category	Risk Description	Risk Rating	Mitigation Plan	Responsibility
1.					
2.					
...					
...					
n-1.					
n.					

8. Risk Management Structure

This section covers roles and responsibilities of various Stakeholders under Risk Management Policy.

Policy proposes the establishment of a comprehensive Risk Management Structure as under:

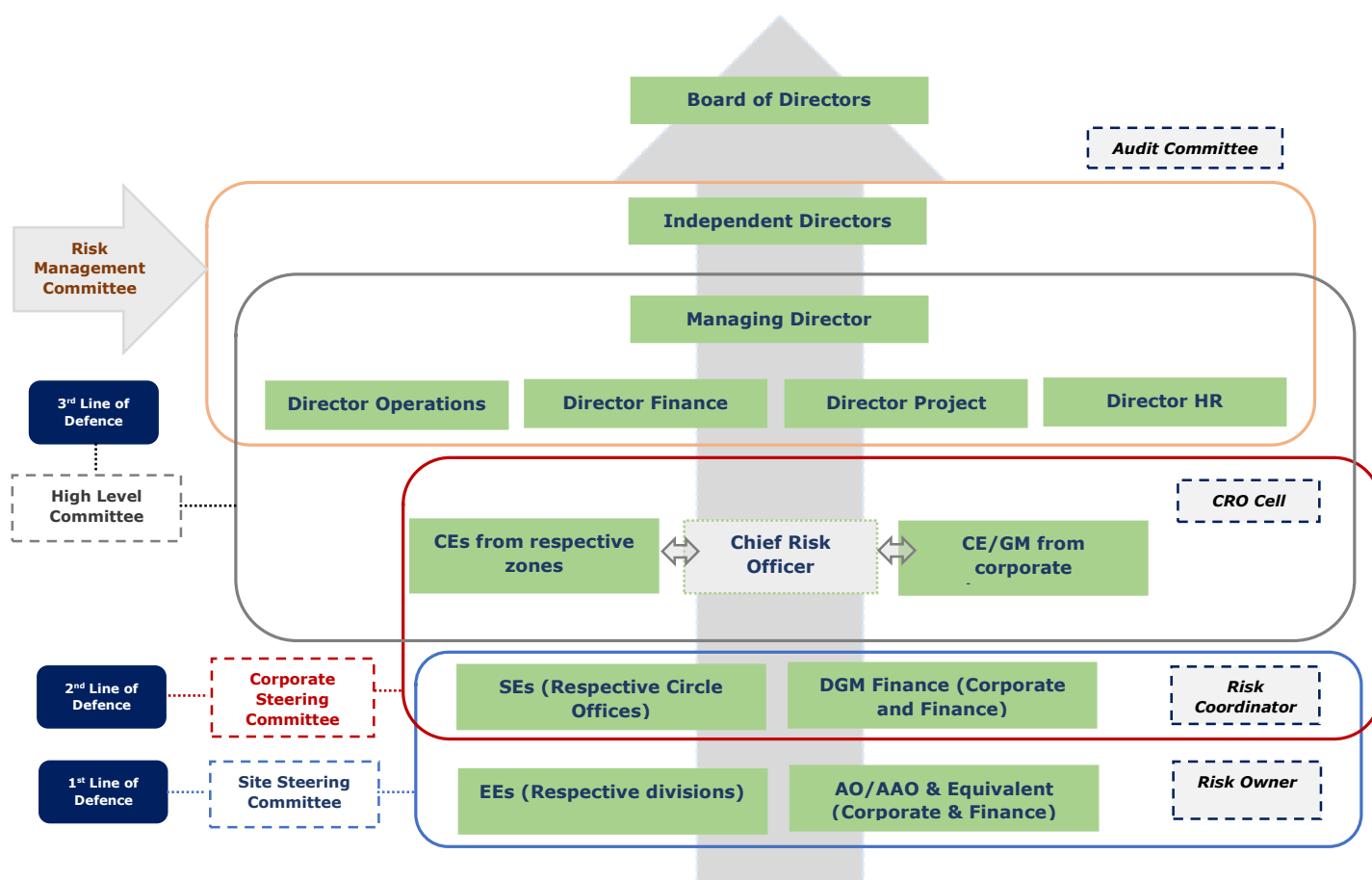


Figure 5: Risk Management Structure

a. Three Lines of Defense Model:

Policy proposes the adoption of the "Three Lines of Defense" model for risk management under Risk Management Committee headed by Independent Directors.

i. The 1st Line of Defense

Site Steering Committee: Individual site steering committees will be formed to identify and monitor risks at the division and circle levels. The site steering will be comprised of Risk owners and Risk Coordinators.

Risk Owners:

Composition: Executive Engineers (“EEs”) of respective divisions, Account Officers or Assistant Account officers or Individuals having the equivalent designation with accountability and authority to monitor the existing risks and identifying the new risks.

Responsibilities of Risk Owners:

- Periodic monitoring of the already identified risk, which consist of noting the occurrence of risk and their impact.
- Identification of new risks along with their root cause, occurrence and impact.
- Consolidation and submission of status of existing risks and new identified risk review reports in every last week of month to Risk Coordinator.

Risk Coordinator:

Composition: Superintending Engineer (“SEs”) of respective Circles/DGM Finance or Individuals having the equivalent designation with responsibility as described below:

Responsibilities of Risk Coordinator:

- Review the status of existing risks and risks identified by the Risk Owner.
- Development and monitoring of risk mitigation plans for existing risks and new identified risks.

- Consolidation and submission of copy of risk register to the CRO cell in the first week of every month, subsequent to submission risk review reports by Risk Coordinator.

ii. The 2nd Line of Defense:

Corporate Steering Committee: A Corporate Steering Committee, headed by Chief Risk Officer (CRO), comprising CEs and SEs/DGMs from various zones, will be formed to identify and review risks escalated by the Site Steering Committee at the corporate level.

Chief Risk Officer (CRO):

Composition: CRO shall be at the Rank of the Chief Engineers (CE) or equivalent at corporate level. The CRO will be overall in-charge for maintaining Risk Management Register with the help of CEs of respective Zones/ GM from corporate office as applicable.

Responsibilities of CRO:

- Review the copy of risk register submitted by the Risk coordinator every bi monthly.
- Maintain the Master Risk Register (corporate level risk register)
- Facilitate corporate level risk assessments and mitigation strategies.
- Work as a bridge between lower management and higher management of the UPCL.
- Apprise the status of existing risks and new identified risks to the Risk Management Committee.

- iii. **The 3rd Line of Defense:** The High Level Committee will manage risk levels, scoring, governance, and decision-making.

High Level Committee (HLC):

Composition: Chaired by the Managing Director, including Directors of Operations, Projects, Finance and HR along with CRO.

Responsibilities of HLC:

- Develop risk appetite limits by risk category.
- Appointment of Risk Owners and Mitigation Officers.
- Assess risk mitigation strategies and identify top risks.
- Monitor business activities and report risks, compliance deficiencies and weaknesses in the same.
- Review of the operating effectiveness of the risk framework and process in every quarter.

b. Risk Management Committee

The Risk Management Committee (RMC) serves as the apex body under the Risk Management Policy, providing strategic oversight and guidance on all risk-related matters under the purview of this policy. The RMC ensure all necessary measures and mitigation action to protect the UPCL's financial interests and enhance its long-term sustainability. The Risk Management Committee shall review the risk reports finalized by High Level Committee. They may advise on mitigation measures and inclusion of new risks.

Composition: Chaired by Independent Director, this committee includes MD along with other Directors of UPCL.

Responsibilities of RMC:

- Monitoring and evaluating the effectiveness of risk mitigation strategies.
- Establishing internal controls to prevent and detect fraud and other irregularities.
- Ensuring compliance with all relevant regulatory requirements related to risk management.
- Advising the board on risk-related matters and recommending appropriate actions.
- Obtain insights and feedback from the Audit Committee and UPCL management on mitigation strategy of identified risks.

c. Board of Directors:

The Board of Directors, through the Risk Management Committee, shall oversee the implementation and review the risk management system across the Company. This comprehensive review shall happen annually.

d. Audit Committee:

The Audit Committee, operating independently from the Risk Management Committee (RMC), will conduct a bi-annual review of the existing risk management processes, including risk assessment and mitigation measures. The Committee will assist the Board by evaluating compliance with risk management protocols and serve as a platform for discussing and addressing risks identified throughout the organization.

9. Risk Monitoring, Recording and Review

This section outlines how existing and new risks, as well as the overall policy, will be monitored and reviewed.

The following structure will be followed for effective risk management:

a. Risk Monitoring

Risk Monitoring is crucial to ensure that risk management plans stay effective and relevant. The primary objectives of risk monitoring are:

- Assess the performance of risk management initiatives.
- Regularly review the Risk Management Framework to ensure its suitability in the current environment.
- Continuously track progress and identify any deviations from the established risk management plan.

i. Risk Review Plan

The risk management timelines are as follows: -

Table 6: Risk Activity Timelines

Activity	Timeline
Review of Risk Register maintained by individual Risk Unit Owners	Monthly
Consolidation of Risk Register to be submitted to Corporate Steering Committee by Steering Committee	Monthly
Review of consolidated risk register by Corporate Steering Committee	Bi- Monthly
Review by High Level Committee	Quarterly
Review by Risk Management Committee	Quarterly
Board of Directors	Bi-Annually
<i>Decision on removal of Risk</i>	<i>Annually</i>

ii. Closure of Risk

A risk may be removed from the risk register under the following conditions:

- Risk Mitigated: The risk has been effectively mitigated to the desired level.
- Risk No Longer Relevant: The risk is no longer applicable due to changes in the external business environment.
- Risk Transferred: The responsibility for managing the risk has been successfully transferred.

b. Risk Recording and Reporting:

Initial Reporting:

- The Risk Coordinator, at first line of defense, will prepare individual risk cards for review and discussion in the Site Steering Committee, coordinated by the CRO's office.
- Based on feedback from the Site Steering Committee, the Risk Coordinator will finalize the risk card and submit it to the CRO's office for review and compilation.
- Additionally, the Risk Coordinator at the Corporate Level will develop individual risk cards and forward them to the CRO's office for approval.

Intermediary Reporting:

- The CRO, together with the Corporate Steering Committee, will review the identified risks and select the key risks to be reported to the High Level Committee on a bi-monthly basis.
- Once approved by the Corporate Steering Committee, the CRO's office will record the risks in the risk register and provide the finalized risks, along with mitigation plans, to the Risk Coordinator for implementation.

Final Reporting:

- The High Level Committee, through the CRO, will conduct a quarterly review of the risks identified by the Corporate Steering Committee.
- The High Level Committee will thereafter discuss the risk with the Risk Management Committee. Risk Management Committee will provide its inputs on the mitigation plan.
- The Risk Management Committee will obtain insights and feedback from the Audit Committee and the Board on the effectiveness of the risk management procedures undertaken.
- In case of emerging or urgent risks, the High Level Committee via Risk Management Committee will inform the Board and recommend necessary actions.

c. Review of Risk Policy

The policy will serve as the guiding framework for risk management at UPCL and will be updated as necessary to reflect changes in risk management regulations, standards, or best practices. Additionally, the policy will undergo a formal review twice a year, in December and June, to ensure it remains current and effective.

10. Risk Management Information System

The company must implement an integrated, enterprise-wide Risk Management Information System (RMIS). RMIS provides tools for identifying, assessing, mitigating, and monitoring risks, allowing for better decision-making and transparency.

Key Considerations:

Capturing Comprehensive Information:

- Risks faced during the operational activities, including delays in work execution and key reasons.
- To facilitate quick and efficient reaction to future occurrences, pertinent information from internal and external sources must be captured and shared.

Risk Register:

Policy provide frameworks to implement 'Risk Registers' (attached herein as **Annexure – 2**) as an immediate measure:

- **Maintained at CRO Level:**

Comprehensive capturing of all risks in division, circle offices and corporate offices. Identification, categorization, and assessment of each risk using specified methodologies. The CRO Cell will have the access to maintain the “Master Risk Register”

- **Monitoring:**

Each Risk Coordinators will have the copy of master risk register in which they will note the status of existing risks and new identified risks and same.

- **Consolidation:** The status of existing and identified risk will further consolidated in the Master Risk Register quarterly and copy of same will again distributed to Risk Coordinators.

- **Risk Register Content:**

- a. Description of the Risk
-

- b. Impact if the Event Occurs
 - c. Summary of Planned Response
 - d. Summary of Mitigation Plan
 - e. Responsible Function/Person
- **Removal of Risk from risk register:** A risk will be removed from the Risk Register under the following conditions:
- a. Risk Mitigated:**
 - Successfully mitigated to the desired extent.
 - Adequate measures implemented to reduce probability and/or impact.
 - b. Risk Not Relevant:**
 - No longer relevant due to a change in the external business environment.
 - External factors render the risk obsolete or inconsequential.
 - c. Risk Transferred:**
 - Effectively transferred to a third party through appropriate mechanisms.
 - Responsibility for managing the risk shifted to an external entity.

The Risk Register will serve as a centralized repository of comprehensive risk-related information, promoting proactive risk management and facilitating real-time decision-making.

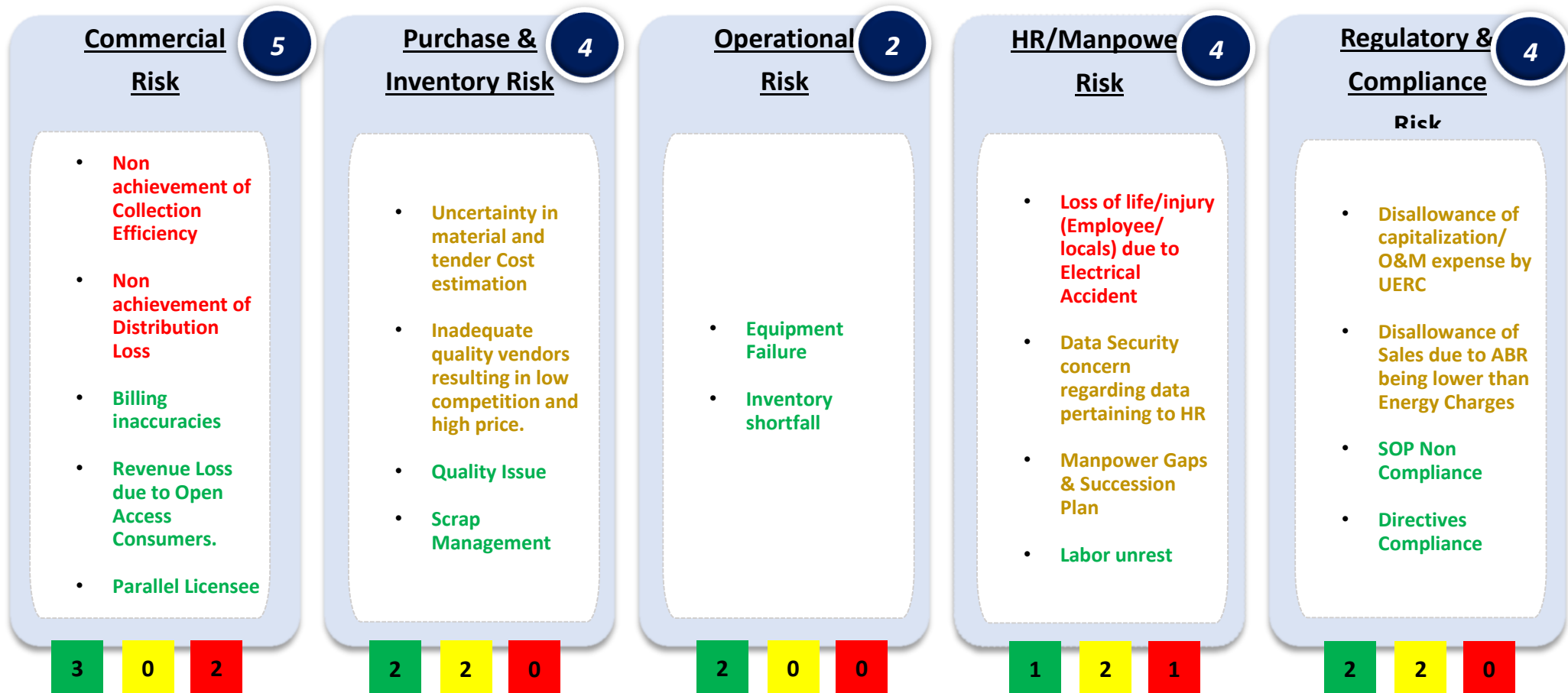
ANNEXURE 1: RISK MATRIX

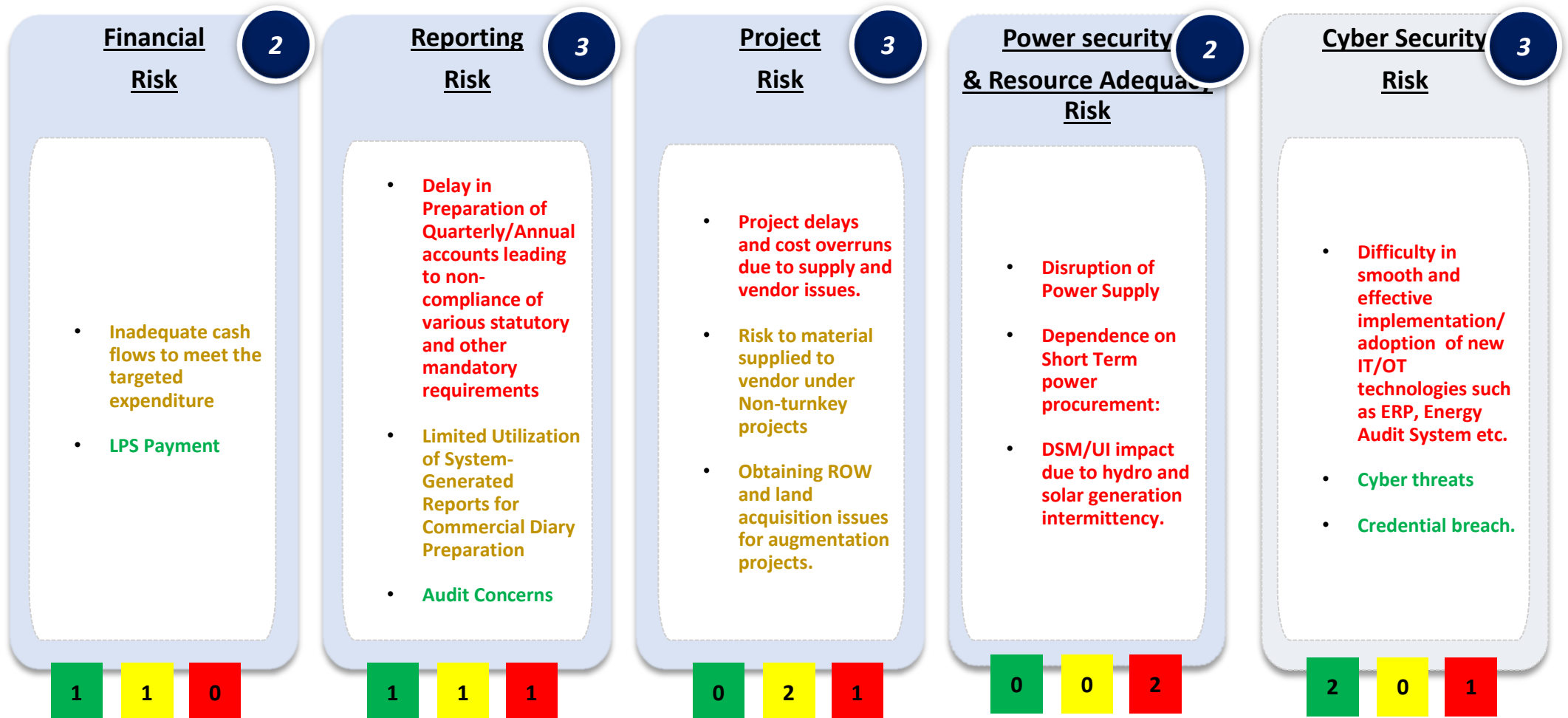
Summary of Risks Identified | Category wise

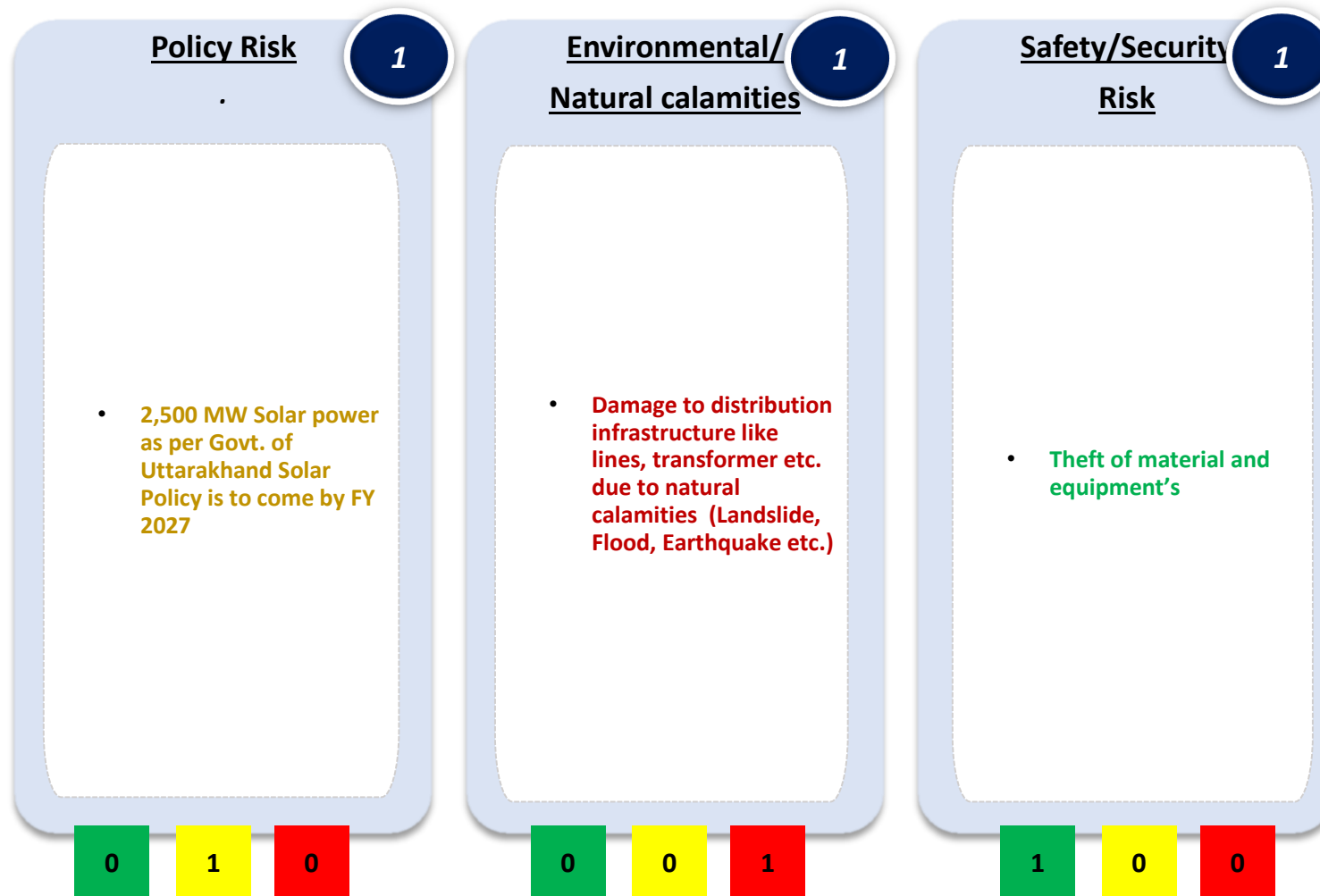
Risk Category	High	Medium	Low	Total
Commercial	2	-	3	5
Operations	-	-	2	2
Power security & Resource Adequacy	3	-	-	3
Financial	-	1	1	2
Reporting	1	1	1	3
Projects	1	2	-	3
Purchase & Inventory	-	2	2	4
Regulatory & Compliance	-	2	2	4
Cyber Security/ Technology	1	-	2	3
HR/Manpower	1	2	1	4
Safety/ Security	-	-	1	1
Environmental/ Natural calamities	1	-	-	1
Policy	-	1	-	1
	10	11	15	36

Risk Ratings & Categorization

Total 36 Risk (Low Risk- 15, Medium Risk- 11 and High Risk- 10)







The framework details have been provided separately in the presentation, outlining the identified issues, corresponding mitigation plans, assigned responsibilities, and risk quantification based on the risk matrix.

ANNEXURE 2: RISK REGISTER

S. No.	Identification Date	Risk Coordinator	Risk Category	Risk Description	Root Cause	Implication	Mitigation Plan	Target Date	Risk rating

ANNEXURE 3: SAMPLE RISK REGISTER

S. No.	Identification Date	Risk Coordinator	Risk Category	Risk Description	Root Cause	Implication	Mitigation Plan	Target Date	Risk rating
1.	XX.XX.XX	XXXX	Environmental Risk	Landslide in an area near Mussoorie.	<ul style="list-style-type: none"> Heavy and prolonged rainfall leading to soil saturation Seismic activity causing instability. 	<ul style="list-style-type: none"> Disruption of power supply lines and infrastructure. Access to sites for maintenance and repair work obstructed. Increased costs for emergency response and infrastructure repairs. Potential revenue loss due to service disruptions. 	<ul style="list-style-type: none"> Seek for alternate arrangement/route for restoring power supply in connecting area. Preventive measures: conduct routine survey to assets landslide risk. Train maintenance crews and local communities on emergency procedures and safety protocols. Establish quick response teams to address power outages and repair damaged infrastructure promptly. Seek Insurance support for such assets. 	XXXX	Likelihood: likely (4) (due to frequent rainfall) Impact: Significant (4) (Significant operational disruption and financial cost and safety) Overall Rating : 16 (High) Impact- RsXX Cr.
2.	XX.XX.XX	XXXX	Commercial Risk	Increase in Loss of Roorkee Zone Rise in T&D losses due to theft, technical inefficiencies, or non-payment of bills.	Inadequate metering infrastructure leading to inaccuracies in recording electricity consumption. Aging or poorly maintained distribution infra. Increase in electricity theft due to economic hardships or unethical practices. Ineffective revenue collection mechanisms leading to non-payment of bills.	<ul style="list-style-type: none"> Reduction in revenue due to unbilled units. Overloading of distribution infrastructure leading to equipment failures and service interruptions. Risk of penalties or fines for failing to meet regulatory standards on T&D losses. 	<ul style="list-style-type: none"> Installing Smart meters for real time monitoring. Conduct regular audits and inspections to identify and address technical inefficiencies Enhance billing and collection processes by mass Raids/ Mass Disconnection Activities. 	XXXX	Likelihood: Likely (4) Impact: Moderate (3) Overall Rating: (12) Medium Impact- Rs. XX. Cr.