

CURTAILMENT RISKS IN RENEWABLE PROJECTS

Understanding challenges affecting revenue output from renewable projects





INTRODUCTION

1. Curtailment remains one of the most persistent and commercially damaging disputes faced by renewable developers across India. Despite “must-run” provisions, PPAs, and regulatory safeguards, developers continue to chase compensation through CERC/SERC petitions and APTEL appeals.
2. The recent rise in tribunal rulings on deemed generation and compensation shows that curtailment is no longer merely a technical issue — it is a material financial risk that developers must proactively manage.



THE PROBLEM — PERSISTENT CURTAILMENT

Persistent Curtailment Challenges

Curtailment remains a major commercial challenge for renewable energy developers in India despite regulatory safeguards.

Legal and Regulatory Actions

Developers pursue compensation through regulatory bodies like CERC, SERC, and APTEL to address curtailment losses.

Financial Risk and Strategy

Curtailment has evolved into a significant financial risk requiring strategic management to mitigate losses and ensure sustainability.

WHY PPAS AND REGULATIONS ARE FAILING



Ambiguous PPA Drafting

PPAs often repeat 'must-run' status without clear classification or compensation guidelines, causing legal ambiguity.

Operational-Financial Gap

SLDCs view 'must-run' as operational, while discoms deny automatic financial entitlements, creating conflicts.

Inconsistent Data Interpretation

Different states classify curtailment differently, complicating unified regulatory enforcement and action.

Weak Enforcement Mechanisms

Without transparent logging and telemetry, 'must-run' clauses lack practical impact against curtailment issues.

ENABLING REGULATION – WHAT EXISTS TODAY

Curtailment Management Guidelines

The Forum of Regulators issued 2022 guidelines mandating classification, logging, and compensation for curtailment.

CERC Enforcement Orders

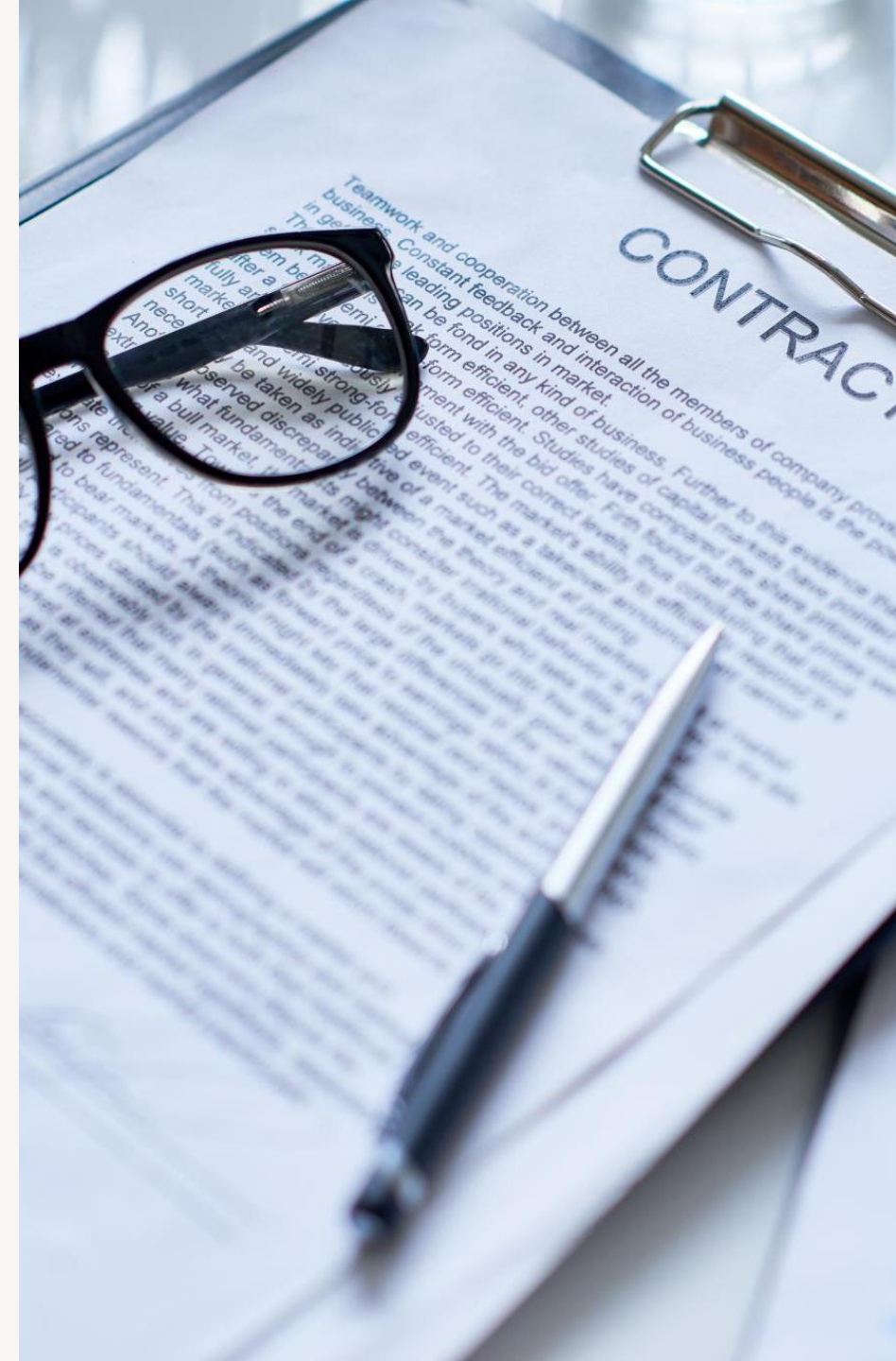
CERC directs SLDCs to enforce 'must-run' provisions and compensate unjustified curtailments.

Judicial Compensation Rulings

APTEL rulings ensure developers receive compensation or deemed generation for arbitrary curtailments.

State-Level Adoption Challenges

Some SERCs improve curtailment methodologies but enforcement and clarity remain inconsistent.



DEVELOPER CHECKLIST — STEPS TO PROTECT REVENUE



Maintain Detailed Logs

Keep comprehensive telemetry, SLDC logs, SCADA data, and written records for reliable evidence in disputes.

Document Curtailment Reasons

Request immediate and clear curtailment justifications to differentiate grid security from commercial motives.

Raise Disputes Promptly

Timely dispute submissions are critical as delays weaken entitlement claims in tribunals.

Leverage Legal and Regulatory Rights

Use PPA clauses, Grid Code, and regulatory guidelines to strengthen claims and protect revenue rights.



THE PATH FORWARD

Regulatory and Operational Alignment

Reducing curtailment risks requires harmonizing regulations, SLDC operations, and power purchase agreements for consistency.

Standardized Curtailment Measures

Implement mandatory curtailment logs, deemed-generation clauses, and automatic compensation to enhance transparency.

Active Risk Management by Developers

Developers should proactively manage risks through strategic planning, documentation, legal action, and regulatory engagement.