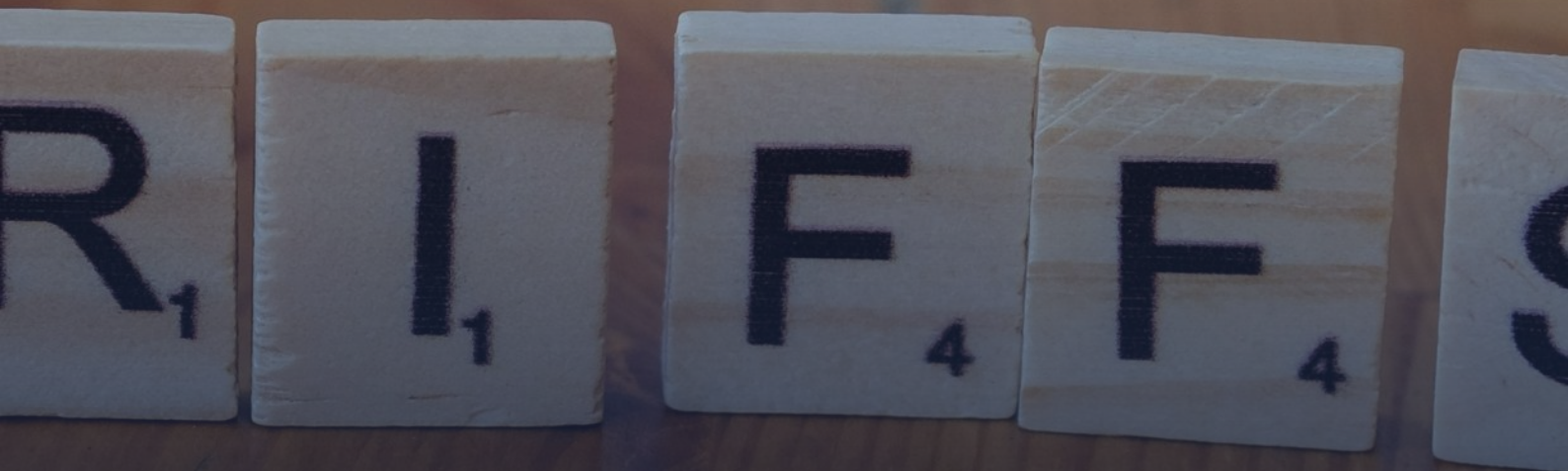




INDIA ENERGY STACK

Tariff Intelligence

Tariff orders published once, as code. Read by every system the same way.

The regulator publishes each tariff order as a signed, machine-readable file alongside the PDF. Billing systems, consumer apps and smart meters read the same rules directly. No re-typing. No drift.

Think of how banks receive exchange rates. Rates arrive as data that systems apply automatically, not as circulars to be retyped by every branch. Tariff Intelligence brings tariff orders to the same standard.

01 THE PROBLEM TODAY

One order, retyped a hundred ways

Every DISCOM retypes the same PDF.

A tariff order is issued as a document. Each DISCOM in the state then manually transcribes the rate slabs, time-of-day surcharges and category definitions into its billing system. Errors and delays are built in.

Every app interprets it differently.

Bill estimators, EV charging planners and rooftop-solar calculators each parse the same order on their own. The consumer's app and the DISCOM's bill can disagree, and neither can prove which is right.

A solar developer evaluating investment across three states retrieves machine-readable tariff orders. Her model computes net-metering economics for each state automatically, with no manual interpretation of PDF tariff schedules. What took days of careful reading now takes minutes.

02 SCOPE

What it is, and what it covers

One signed file per policy. It states:

- which policy it is, who issued it, and the period it is valid for;
- the rate slabs: each consumption tier and its price;
- the time-of-day surcharges and discounts, with the hours they apply;
- the amendment chain: each new version names the version it replaces.

What it deliberately leaves out

- ✗ It does not change who sets tariffs or how orders are made. The commission's order remains the authority; the file is a faithful, signed restatement.
- ✗ No central platform. The file is published openly and each system reads it directly.
- ✗ Billing systems are not replaced. They simply read rates from the signed file instead of a hand-typed table.

03 HOW IT WORKS

Four steps, start to finish

1

Author

The commission prepares the tariff as structured data alongside the order it publishes today.

2

Sign & publish

The file is digitally signed and published openly. Anyone can fetch it and verify who issued it.

3

Ingest

DISCOM billing systems, consumer apps and smart meters read the same file. One source, zero re-typing.

4

Amend

A change is a new signed version that names what it replaces. Systems update on their next fetch. No memos.

FOUR TERMS, IN PLAIN WORDS

Policy-as-code - a rule published as structured data that software can apply directly.

Slab - one tier in a telescopic tariff, such as 0 to 100 units at a set price.

ToD surcharge - a time-of-day addition or discount on the basic rate.

Version chain - each amendment names the version it replaces, so systems always know the current rule.

04 THE RAILS UNDERNEATH

What IES provides

One signed source of truth.

Each tariff exists as exactly one signed file. Every reader gets the same rules, verified against the issuer's public key.

Open publication.

Tariffs are public information. The file is free to fetch and verify; no accounts, no gatekeeping.

A standard rate structure.

Slabs and time-of-day rules follow one format across states, so one billing evaluator works everywhere.

Clean amendments.

New versions are linked to old ones. Nothing is silently overwritten, and history is auditable.

05 VALUE UNLOCKED

What each stakeholder gains, and how

Regulators (SERCs)

Value: publish once, and every downstream interpretation is identical. Amendments are a new signed file, not a fresh round of circulars and follow-ups.

How: the file is a signed restatement of the order they already issue.

DISCOMs

Value: the billing system stops carrying a hand-typed, state-coded rate table. The same rate evaluator works against any state's signed policy.

How: billing reads slabs and surcharges from the file directly.

App developers

Value: bill estimators, EV charge planners and solar payback calculators read one canonical source. Best-effort PDF parsing ends.

How: they fetch the signed file and verify it offline.

Consumers & investors

Value: the bill and the app agree by construction, and investment models compute cleanly across states.

How: everyone's software reads the same signed rules.

WHERE IT STANDS TODAY

Live or staged for tariff orders and dispatch guides. An Expression of Interest for Energy Policy as Code is open with REC.

Tariff orders · Live or staged

Dispatch guides · Live or staged

Penalties & SLAs · In draft

EoI open with REC

BEFORE IES

Every DISCOM and every app re-keyed the same PDF order, each in its own way.

WITH IES

One signed file, read identically by billing systems, apps and meters.

WHAT IES DOES NOT DO

IES does not set tariffs. The commission's order remains the authority.

IES runs no platform. The signed file is published openly and read directly.

Billing systems are not replaced. They read rates from the file instead of a typed table.

Read the full specification

india-energy-stack.gitbook.io/docs → [Use Cases](#) → [Tariff Intelligence](#)