

## **SOLAR ENERGY SHORTFALL INSURANCE POLICY**

This Policy is effective when the accompanying Declarations and Policy schedule is signed by an authorized representative of HDFC ERGO General Insurance Company Limited (hereinafter called "The Company")

Policy wording, Policy schedule, Declarations and any Endorsements thereto shall be considered one document and any word or expression to which a specific meaning has been attached in any of them shall bear such meaning throughout unless specified otherwise.

Throughout this policy, the words "you" and "your" refer to the Named Insured shown in the Declarations and Policy Schedule. The words "we", "us" and "our" refer to the Company providing this Insurance. Other words and phrases that appear in bold letter have, for the purpose of this Policy, a special meaning which can be read in the Definitions section G. Examples are shown for illustrative purposes only and do not represent predicted or expected outcomes. References to Declarations refer to the Common Policy Declarations and the Declarations for this policy.

## A. Coverage

This policy provides insurance for a Covered Cause of Loss as defined in A.1. below. In the event of a Covered Cause of Loss, we will pay for loss as described in A.2. below.

## 1. Covered Cause of Loss

A Covered Cause of Loss for this policy is the following:

- a. Unintentional error in the calculation of the "target production";
- b. Defect of the "insured energy installation"; or
- **c.** If the "**insured energy installation**" is solar, actual solar radiation that is less than assumed in the "**target production**" calculation.

The "energy shortfall" must arise solely from one or more of these causes. A Covered Cause of Loss does not include any portion of "energy shortfall" arising from any excluded cause of loss.

### 2. Coverage Provided

We will pay your "energy shortfall" during a "energy shortfall policy year" provided that such "energy shortfall" is reported to us within forty-five (45) days of the end of the applicable "energy shortfall policy year".

#### B. Exclusions

We will not pay for any excluded loss, damage, or expense even though any other cause or event contributes concurrently or in any sequence to the loss, damage, or expense.

- 1. We will not pay for "energy shortfall" caused directly or indirectly by any of the following.
  - a. Direct Physical Loss
    Any direct physical loss or damage.
  - b. Discrepancy from Specifications



Any discrepancy between the specifications for the "insured energy installation" used to calculate the "target production" and the "insured energy installation" actually built and operating.

c. Electricity Feed or Utility Meter

Failure or breakdown of the electricity feed or utility meter.

d. External Obstruction

Any external obstruction not present at the inception of the Policy Period.

e. Failure to Follow Operating Instructions

Any failure by you or others on your behalf to follow manufacturers' operating and maintenance instructions for the "insured energy installation".

f. Fines

Fines, penalties, punitive damages, exemplary damages, or any court injunction or court process.

g. Infidelity

Infidelity or dishonesty of you or your officer, director, proprietor, or partner, acting alone or in collusion with others, or the infidelity or dishonesty of any officer, director, proprietor, or partner of any proprietorship, partnership, corporation, or association engaged by you to perform any service or perform any act in connection with any "insured energy installation".

h. Inspection or Maintenance

Inspection or maintenance work.

i. Lack of Load or Demand

Voluntary choice not to operate the "insured energy installation" to its full capacity for any reason.

j. Local Utility System Failure

Inability for any reason of the local utility system to provide or receive electrical power.

k. Nuclear, Biological, Chemical or Radioactive (NBCR) Materials

Any "NBCR terrorist activity" and any action taken to hinder, defend against, or respond to any such activity.

Nuclear Hazard

Nuclear reaction, detonation or radiation, or radioactive contamination, however caused.

m Ordinance or Law

The enforcement of, or change in, any ordinance, law, regulation, rule, or ruling regulating or restricting repair, replacement, alteration, use, operation, construction, or installation.

n. Unauthorized Modification

Modification of the "insured energy installation" unless authorized by the manufacturer.

o. Volcanic, Meteor or Asteroid Action

Ash, dust, or particulate matter arising from volcanic, meteor, or asteroid action.

p. War and Military Action

(1) War, including undeclared or civil war;



- (2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign, or other authority using military personnel or other agents; or
- (3) Insurrection, rebellion, revolution, usurped power, political violence, or action taken by governmental authority in hindering or defending against any of these.

#### 2. Other Exclusions

We will not pay for:

- a. Any increase in loss due to the suspension, lapse, termination or cancellation of any license, contract, lease or permit.
- b. Any loss, damage or expense other than "energy shortfall".

## C. Limit Of Insurance

Any payment made under this policy will not be increased if more than one insured is shown in the Declarations / Policy schedule or if you are comprised of more than one legal entity.

### **Energy Shortfall Annual Limit**

The most we will pay for loss arising from any one "energy shortfall policy year" is the amount shown as the Energy Shortfall Annual Limit in the Declarations / Policy schedule.

As respects any "energy shortfall policy year" that is less than one year in length, the applicable Energy Shortfall Annual Limit will be reduced proportionately.

## D. <u>Deductible</u>

This policy is not subject to any deductible beyond the self-retention that is implicit in the calculation of the "insured energy yield projection".

## E. Loss Conditions

The following conditions apply in addition to the Common Policy Conditions:

#### 1. Abandonment

There can be no abandonment of any property to us.

## 2. Duties in the Event of Loss

You must see that the following are done in the event of loss:

- **a.** Submit to us a notice of loss as soon as practicable but in no event later than forty-five (45) days after the close of the applicable "**energy shortfall policy year**".
- **b.** If requested by us, submit to us a proof of loss statement, signed and sworn to by you.
- **c.** As often as may be reasonably required, permit us to inspect your property, premises, and records. Also permit us to make copies from your books and records.
- **d.** If requested by us, permit us to examine you and any of your agents, employees, and representatives under oath. We may examine any insured under oath while not in the presence of any other insured. Such examination:



- (1) May be at any time reasonably required;
- (2) May be about any matter relating to this insurance, your loss or your claim, including, but not limited to, your books and records; and
- (3) May be recorded by us by any methods we choose.
- e. Cooperate with us in the investigation and settlement of the claim.

### 3. Proving Your Loss

It is your responsibility, at your own expense, to provide documentation to us that the loss is covered under this policy and calculate the amount of the loss that you claim is covered.

# 4. Salvage and Recoveries

When, in connection with any loss under this policy, any salvage or recovery is received after the payment for such loss, the amount of the loss shall be recalculated on the basis on which it would have been settled had the amount of salvage or recovery been known at the time the loss was originally determined. Any amounts thus found to be due either party from the other shall be paid promptly.

## F. Additional Conditions

The following conditions apply in addition to the Common Policy Conditions:

#### Additional Insured

If a person or organization is designated in this policy as an additional insured shown in the Schedule of Additional Interests, we will consider them to be an insured under this policy only to the extent of their interest in the "**insured energy installation**".

#### 2. Application of Coverage

Unless otherwise indicated in the Declarations / Policy schedule, this policy applies on a portfolio basis to all "insured energy installations". This means that, if there are multiple energy installations for which this coverage applies, the application of the coverage limit and the calculation of amounts such as the "insured energy yield projection" will be based on the total of all "insured energy installations".

#### Bankruptcy

The bankruptcy or insolvency of you or your estate will not relieve you or us of any obligation under this policy.

### 4. Concealment, Misrepresentation or Fraud

We will not pay for any loss and coverage will be void if you or any additional insured at any time before or after a loss:

- a. Intentionally cause or allow loss, damage, or expense to occur in order to collect on insurance; or
- b. Intentionally conceal or misrepresent a material fact concerning:
  - (1) This policy;
  - (2) The "insured energy installation";
  - (3) Your interest in the "insured energy installation"; or
  - (4) A claim under this policy.

# 5. Due Diligence

You agree to do all the following:



- a. Maintain and operate the "**insured energy installation**" in accordance with manufacturers' guidelines and with reasonable care. For solar installations this includes, but is not limited to, taking reasonable means to maintain energy panels free from soil, dirt, or other obstructions.
- b. Maintain all records and documentation that may be necessary to adjust a claim under this policy.
- c. Cooperate with us in any action we may take against a third party whose negligence may have contributed to a loss under this policy.

### 6. Legal Action Against Us

No one may bring a legal action against us under this policy unless:

- a. There has been full compliance with all the terms of this policy; and
- b. The action is brought within two years after the close of the applicable "energy shortfall policy year".

### 7. Loss Example

The following Energy Shortfall Calculation Example is provided to assist in understanding Energy Shortfall Coverage. The numbers in this example are for illustration only and are not intended to describe the risk actually insured under this policy.

### **ENERGY SHORTFALL CALCULATION EXAMPLE**

Sample Insured Project:

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"Target production" is 1,800,000 kWh
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Energy Shortfall Annual Limit is \$43,200

## "Time-Adjusted Energy Yield Projection" (Adjusted for "Annual degradation factor", in kWh)

Year 1 1,800,000 Year 2 1,785,600 Year 3 1,771,200 Year 4 1,756,800 Year 5 1,742,400

## "Insured energy yield projection" (90% of "Time-Adjusted Energy Yield Projection", in kWh)

Year 1 1,620,000 Year 2 1,607,040 Year 3 1,594,080 Year 4 1,581,120 Year 5 1,568,160

For this sample insured project, if in Year 2 the "Actual Energy Yield" is 1,550,000 kWh

"Energy shortfall" for Year 2 would be: 1,607,040 - 1,550,000 = 57,040 kWh shortfall 57,040 kWh shortfall x 0.8/kWh "**Agreed rate**" = \$4,563 This amount is within the Energy Shortfall Annual Limit of \$43,200 "Energy shortfall" = \$4,563

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Solar Energy Shortfall Insurance UIN: IRDAN125P0003V01201718

<sup>&</sup>quot;Agreed rate" is 8 cents per kWh

<sup>&</sup>quot;Target production" times "Agreed rate" = \$144,000

<sup>&</sup>quot;Annual degradation factor" is .8%

<sup>&</sup>quot;Insured output factor" is 90%



For purposes of the calculation example, it does not matter whether the numbers refer to the projections and output of a single project or to total projections and total output of a portfolio of projects. Note, however, that if the numbers apply to a portfolio, it is possible that individual projects may have experienced an insurable "energy shortfall" loss if insured on their own but may not be part of a covered "energy shortfall" loss when combined into a larger portfolio.

### 8. Loss Payable

- a. We will pay you and the loss payee shown in the Schedule of Additional Interests for loss covered by this policy, as interests may appear. The insurance covers the interest of the loss payee unless the loss results from conversion, secretion, or embezzlement on your part or on the part of the loss payee.
- b. We may cancel the policy as allowed by the Cancellation Condition. Cancellation ends this agreement as to the loss payee's interest. If we cancel, we will mail you and the loss payee the same advance notice.
- c. If we make any payment to the loss payee, we will obtain their rights against any other party.
- 9. Maintaining Your Property and Equipment

It is your responsibility to appropriately maintain your property and equipment. We will not pay your costs to maintain, operate, protect, or enhance your property or equipment, even if such costs are to comply with our recommendations or prevent loss that would be covered under this policy.

#### 10. Other Insurance

If there is other insurance that applies to the same loss, damage, or expense, this policy shall apply only as excess insurance after all other applicable insurance has been exhausted.

- 11. Policy Period, Coverage Territory Under this policy:
  - **a.** The "energy shortfall" must occur during the Policy Period, but expiration of the policy does not limit our liability.
  - **b.** The "**insured energy installation**" must be located within the Coverage territory as specified in item 11 of the Declaration / Policy Schedule.
- 12. Policy Period Newly Constructed "Insured energy installation"

This policy does not apply to "insured energy installations" that are under construction or "Operational testing". As respects any such "insured energy installation", coverage under this policy will be effective at 12:01 a.m. local time on the day following the day when "Operational testing" has been successfully completed and you have contractually accepted the "insured energy installation", if such date falls within the Policy Period.

#### 13. Proration

If a "energy shortfall policy year" is less than one year long, all the factors used to calculate the "energy shortfall" will be calculated proportionately, with appropriate weighting given for seasonality of output and rates.

If an excluded cause of loss reduces or eliminates output for a portion of a "energy shortfall policy year", the remaining portion of the "energy shortfall policy year" will be treated as a "energy shortfall policy year" that is less than one year long.



### 14. Quarterly Reports

You agree to provide us with reports at least four times per year. Such reports will include information on the "actual energy yield" of the "insured energy installation" for the applicable time period as well as the "theoretical solar energy production" for the same period at the site. You agree to provide us with such reports within forty-five (45) days of the end of the applicable quarterly periods that respectively precede the dates of January 1, April 1, July 1, and October 1.

#### 15. Reinstatement

- a. This provision applies in the following cases:
  - (1) If a report you provide to us in accordance with Additional Condition 14. Quarterly Reports indicates that the "actual energy yield" for the "insured energy installation" on a policy year-to-date basis is less than the portion of the "insured energy yield projection" that is applicable for the same time period; or
  - (2) You submit a claim for a loss under this policy.
  - (3) In computing the portion of the "insured energy yield projection" that is applicable for item
    - (1) above, you may use either of the following calculations:
    - (a) Pro-rate the annual amount for the applicable time period; or
    - (b) Calculate the "**insured energy yield projection**" by month in proportion to the monthly projections used to calculate the "**target production**".
- b. When this provision applies, this policy will not apply to any subsequent "energy shortfall policy year" unless you do the following:
  - (1) Commence an investigation of factors contributing to the shortfall within five (5) business days of submission of the claim or report; and
  - (2) Take all reasonable actions indicated by such investigation as soon as practicable.

#### 16. Target production

The "target production" shown in the Declarations / Policy schedule is based on a calculation using a third-party software tool with data entered by you or by others at your direction. Any deliberate misrepresentation will void this coverage.

#### 17. Transfer of Rights of Recovery Against Others to Us

If you or any person or organization to or for whom we make payment under this policy has rights to recover damages from another, those rights are transferred to us to the extent of our payment. You or that person or organization must do everything necessary to secure our rights and must do nothing after loss to impair them. But you may waive your rights against another party in writing:

- a. Prior to the beginning of the "energy shortfall policy year" within which the "energy shortfall" occurred.
- **b.** After the beginning of the "energy shortfall policy year" within which the "energy shortfall" occurred only if, at the time of such "energy shortfall policy year", that party is one of the following:
  - (1) Someone insured by this policy; or
  - (2) A business firm:
    - (a) Owned or controlled by you; or
    - (b) That owns or controls you.

#### 18. Arbitration

Any dispute concerning the interpretation of the terms, exclusions or conditions contained herein is understood and agreed to by both the parties are subject to Indian law.



If any difference arises as to the amount to be paid under this policy (liability being otherwise admitted) or the interpretation of a clause under this policy (including the Schedule and Endorsements), such difference shall be referred to arbitration, in accordance with the [Indian] Arbitration and Conciliation Act 1996, as amended, and the making of an award shall be a condition precedent to any liability for us to make any payment under this policy. Such arbitration panel shall consist of one arbitrator selected by you, one arbitrator selected by us, and a third independent arbitrator selected by the first two arbitrators in accordance with the provisions of the [Indian] Arbitration and Conciliation Act, 1996. The arbitration shall be governed by Indian Law and the venue of arbitration shall be within India.

- (i) All proceedings in any arbitration shall be conducted in English and a daily transcript in English of such proceedings shall be prepared.
- (ii) The cost of arbitration undertaken in accordance with this section shall be borne by the parties associated with the arbitration and shall share equally in the costs of the arbitration proceedings and presiding arbitrator.
- (iii) It is clearly agreed and understood that no reference to arbitration can be made if the we has either not admitted or has disputed liability in respect of any claim under or in respect of this Policy.
- (iv) In the event that these arbitration provisions shall be held to be invalid then all such disputes or differences shall be referred to the exclusive jurisdiction of the Indian Courts.

It is further expressly agreed and declared that if we shall disclaim liability in respect of any claim and is not within 12 calendar months from the date of such disclaimer be made the subject matter of a suit or proceeding before a Court of law or any other forum, it shall for all purposes be deemed to have been abandoned and shall not thereafter be recoverable hereunder.

#### 19. Premium payment

It is hereby agreed that, as a condition precedent to any liability under this policy, any premium due must be paid and actually realised by us in full prior to the inception of risk. In the event of non-realisation of the premium, this policy shall be treated as void-ab-initio.

#### 20. Jurisdiction

All disputes arising out of or under this policy will be subject to determination by any Court of competent jurisdiction within India.

## G. Definitions

 "Actual Energy Yield" means the actual output to the receiving grid of the "insured energy installation" during a given "energy shortfall policy year". The "actual energy yield" will be expressed in kilowatt hours (kWh) unless an alternate energy unit is indicated in the Declarations / Policy schedule.

If this policy applies to a schedule of multiple energy installations, the "actual energy yield" will be the total of the energy yields for the entire schedule.

- 2. "Agreed rate" means the amount indicated as the "agreed rate" in the Declarations / Policy schedule. This will be in a currency specified on the Declarations / Policy Schedule amount per kilowatt hour (kWh) unless an alternate energy unit is indicated in the Declarations / Policy schedule.
- 3. "Annual Degradation Factor" means the amount by which the projected output of the "insured energy installation" is expected to be reduced for each year of service. This factor may be provided by the project manufacturer or engineer or it may be determined by us. The "annual degradation factor" for this insurance is indicated in the Declarations / Policy schedule.



If this policy applies to a schedule of multiple energy installations, the "**annual degradation factor**" will apply equally to all installations on the schedule.

If this policy applies to a schedule of multiple energy installations, the "agreed rate" will apply equally to all installations on the schedule.

4. "Energy Shortfall" means the amount by which the "actual energy yield" for the applicable "energy shortfall policy year" is less than the "insured energy yield projection" for that same period times the "agreed rate". "Energy shortfall" does not include any reduction in "actual energy yield" arising from an excluded cause of loss.

If this policy applies to a schedule of multiple energy installations, the calculation of "energy shortfall" will be made over the entire schedule.

- **5.** "Energy shortfall policy year" means a period of up to one year during the Policy Period as follows:
  - a. If the "insured energy installation" is under construction or "Operational testing", the first "energy shortfall policy year" will begin on the day following your acceptance of the completed, tested installations, as further described in Additional Condition F.12. Policy Period Newly Constructed "Insured energy installation". Any subsequent "energy shortfall policy years" will begin on an anniversary of that date.
  - b. If the "insured energy installation" is not under construction or "Operational testing", the first "energy shortfall policy year" will begin on the effective date of this policy. Any subsequent "energy shortfall policy years" will begin on an anniversary of that date.
  - **c.** Unless otherwise specified, the final "**energy shortfall policy year**" will end on the expiration date of the policy and may be less than a full year.
  - **d.** The last "**energy shortfall policy year**" for each "**insured energy installation**" may be a period of less than one year. If so, coverage will be pro-rated as described in Additional Condition F.13.
- **6.** "Insured energy installation" means the energy generating equipment insured under this policy and included in the calculation of the "target production".
- 7. "Insured energy yield projection" means the "time-adjusted energy yield projection" times the "insured output factor".

If this policy applies to a schedule of multiple energy installations, the calculation of the "insured energy yield projection" will be made over the entire schedule.

**8.** "Insured output factor" means the percentage of the "time-adjusted energy yield projection" that is insured by this policy. The "insured output factor" for this insurance is indicated in the Declarations / Policy schedule.

If this policy applies to a schedule of multiple energy installations, the "insured output factor" will apply equally to all installations on the schedule.

- 9. "NBCR Terrorist Activity" means any deliberate, unlawful act that:
  - **a.** Includes, involves, or is associated with, in whole or in part, the use or threatened use of, or release or threatened release of, any nuclear, biological, chemical, or radioactive agent, material, device or weapon except where you can demonstrate to us that such activities or threats thereof



were motivated solely by personal objectives of the perpetrator that are unrelated, in whole or in part, to any intention to:

- (1) Promote, further or express opposition to any political, ideological, philosophical, racial, ethnic, social or religious cause or objective;
- (2) Influence, disrupt or interfere with any government related operations, activities or policies;
- (3) Intimidate, coerce or frighten the general public or any segment of the general public; or
- (4) Disrupt or interfere with a national economy or any segment of a national economy.
- **b.** Includes, involves, or is associated with, in whole or in part, the use or threatened use of, or release or threatened release of, any nuclear, biological, chemical or radioactive agent, material, device or weapon that is declared by any authorized governmental official to be or to involve terrorism, terrorist activity or acts of terrorism.
- 10. "Operational testing" means a testing period following the completion of the construction of a system, its components and connections. "Operational testing" begins with operation or load simulation for the purpose of testing machinery, equipment and other "covered property". "Operational testing" ends when the property has successfully completed such testing.
- **11.** "Target production" means the projected output of the "insured energy installation". This is described further in Additional Conditions F.16. The "target production" for this insurance is indicated in the Declarations / Policy schedule.

If this policy applies to a schedule of multiple energy installations, the "target production" will be the total of the "target productions" for the entire schedule.

- **12.** "Theoretical Solar Energy Production" means the irradiance based energy production measured in kilowatt-hours (kWh) that should have been produced given actual weather conditions at the site of the "insured energy installation", including but not limited to actual irradiance, temperature, and humidity. This definition applies only to solar "insured energy installations".
- 13. "Time-Adjusted Energy Yield Projection" means:
  - a. For the first "energy shortfall policy year", "time-adjusted energy yield projection" means the "target production".
  - b. For each additional "energy shortfall policy year", "time-adjusted energy yield projection" means the "time-adjusted energy yield projection" for the prior "energy shortfall policy year" minus an amount equal to the "annual degradation factor" times the "target production".