

RENEWABLE ENERGY AUCTIONS TOOLKIT



SETTING FINANCIAL GUARANTEES AND PENALTIES



ENSURING THE SERIOUSNESS OF BIDS AND INCREASING THE CHANCES OF PROJECT COMPLETION

Renewable energy auctions entail risks during the bid qualification process and through the implementation of awarded capacities or delivery of procured energy. Penalties, backed by financial guarantees, can help mitigate these risks by ensuring the seriousness of bids and reducing the chances of project realization delays, underperformance, or non-realization. However, financial guarantees and penalties that are too high can deter participation, negatively impact competition in the auction, and lead to higher risk premiums and bid prices.

DESIGNING FINANCIAL GUARANTEES

Bidders must present financial guarantees when entering the auction and upon winning a bid. The auctioneer, which can be the buyer or a designated government authority, can collect a bank guarantee or a cash deposit. If the bidder does not fulfill its contractual obligations (e.g., in terms of project commissioning and/or energy delivery requirements) the buyer confiscates any penalties associated with the financial guarantee.

Financial guarantees can be bid or performance related. Financial guarantees usually relate to the bid submission (i.e., bid bond) or the implementation phase (i.e., completion and performance bonds). Bid bonds aim to ensure the successful bidder's commitment to enter into a contract after being awarded. If a successful

bidder does not sign the power purchase agreement (PPA), the auctioneeer will retain the bid bond.

Performance and completion bonds protect the buyer against project delays, non-completion, and underperformance during the operation phase. The auctioneer collects a completion bond for the benefit of the buyer in the case that an awarded project is not commissioned by the agreed commercial operations date; otherwise, the bidder receives the bond back. An auctioneer may also define a performance bond to ensure the commissioned project meets energy generation and technical performance criteria established in the PPA.

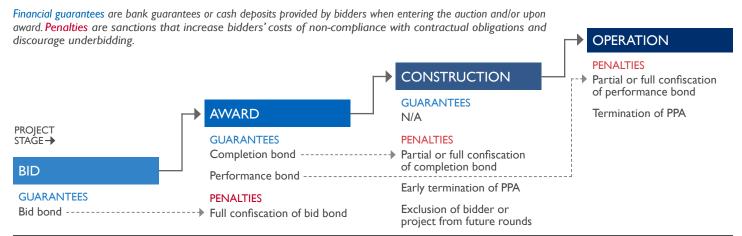
The terminology of financial guarantees and penalties used in this document highlights basic elements, but **terms vary across countries.**

DESIGNING FINANCIAL PENALTIES

Aside from the full or partial confiscation of financial guarantees if the bidder does not fulfill its contractual obligations, penalties applied by the buyer may include the termination of the PPA, exclusion of the bidder or project from future rounds, or a reduction in the remuneration period or level. The buyer may also escalate penalties over time to account for the extent of delays or deviation from contractual obligations.

Penalties can help reduce the possibility of delays, underperformance, and project failures by increasing the cost of noncompliance with contractual obligations for bidders. They also reduce incentives for underbidding by pushing bidders toward more cost-reflective bids.

RENEWABLE ENERGY AUCTION FINANCIAL GUARANTEES AND PENALTIES: TERMINOLOGY AND PROCESS



AUCTION DESIGN: SETTING FINANCIAL GUARANTEES AND PENALTIES

BOX I. FINANCIAL GUARANTEES AND PENALTIES BY COUNTRY

BRAZIL^I

FINANCIAL GUARANTEES

Bid bond: 1% of estimated investment Completion bond: 5% of estimated investment

PENALTIES

Penalties for supply deficits and surpluses: In 2009–2016, RE producers had a window of 4 years for wind and I year for solar PV to generate the contracted amount of energy and a supply range exempted from penalties of 90–130% for wind and 90–115% for solar PV. Since 2019, RE producers have to deliver or financially bear the contracts on an hourly basis following the consumption profile. Deficits on each hour are reimbursed at the spot price of the hour on a consolidated monthly settlement.

SOUTH AFRICA²

FINANCIAL GUARANTEES

Bid bond: ZAR 100kW (\$6.9/kW)³, doubled to ZAR 200/kW (\$13.7/kW) as a requirement to be appointed as a preferred bidder

PENALTIES

Contract termination after more than 180 days of construction delay; contract period reduced by two days for each day of delay.

GERMANY (SOLAR PV AUCTIONS)

FINANCIAL GUARANTEES

Bid bond: 5€/kW (\$5.5/kW)⁴ Completion bond: 45€/kW (\$49.5/kW); reduced to 20€/kW (\$21/kW) if proof of project completion milestone is provided

PENALTIES

Tariff reduction for delays after 18 months of project non-completion by €0.003/kWh; contract termination and execution of financial guarantees for delays after 24 months of non-completion.

International experiences show that in the absence of sufficient penalties, the risk of delays and project non-realization is higher. The lack of penalties for non-completion in France's EOLE 2005 auctions led to a low rate of project completion: only ten percent of the generation contracted was delivered five years after the award.

However, excessive penalties can increase risks for bidders and increase bid prices. Overly harsh penalties may deter project developers from participating and result in lower competition levels. On the other hand, if penalties are too low, the risk of bidders gaming the process is higher.

For example, in Kazakhstan, developers placed low bids that were later withdrawn to ensure the selection of bids with higher prices. The penalty payment resulting from the execution of the bid bond was arguably not sufficiently high to discourage bidders from engaging in this behavior.

DETERMINING GUARANTEE AND PENALTY SIZES

Auction designers can set financial guarantees and penalties as a lump sum payment per unit of capacity or as a share of total investment costs.

Guarantee and penalty size should be tailored to the context-specific project costs and risks and should consider the cost of obtaining material prequalifications already required from bidders. Financial guarantees and penalties may be set to increase the cost of defaulting for the developer, or to compensate costs incurred by the offtaker.

While bidders usually have an intent to realize the project at the time of bidding, economic rationales may change during the project development process. For example, an increase in costs at the time of construction may lead to abandonment of the project if alternative investments are deemed more profitable.

Developers may delay commissioning if the anticipated benefits exceed applicable delay penalties. Auction designers set the size of guarantees and penalties at a level that provides an incentive to complete the project on time. Alternatively, auction designers can set financial guarantees and penalties to compensate costs incurred by the offtaker if the bidder abandons or delays the project. In this case, penalties are calculated based on the offtaker's costs of procuring the power elsewhere, such as at a wholesale market, through an international power trade, at the PPA price of alternative power plants, or by using the utility's own, potentially more expensive, generation capacity.

Even if the offtaker does not need the power, the penalties could still compensate for the cost of missing a renewables portfolio obligation target. In this case, auction designers may define the compensation per days of delay or by the percentage shortfall from the contracted capacity in the PPA.



¹http://auresproject.eu/files/media/countryreports/pdf3_brazil.pdf; ²https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2018/Apr/IRENA_Auctions_ Sub-Saharan_Africa_2018.pdf; ³Conversion rate: ZAR 14.58 = \$1 (source: xe.com 1/29/20); ⁴Conversion rate: 0.91€ = \$1 (source: xe.com, 1/29/20)

