AVAILABILITY AND IRRADIATION GAIN GUARANTEE

The first "Guarantee Year" will be the one year period commencing on the day after the start of the Services Term and concluding on the one-year anniversary of the Services Term under the Agreement, and subsequent Guarantee Years will comprise each succeeding one Year period thereafter. The System Availability Guarantee shall end upon termination or expiration of this Agreement.

A. Availability

1. Calculation of Availability.

From Substantial Completion, and for each operation year "i", the Contractor shall guarantee that the availability will be over or at least equal to the System Availability Guarantee. It is noted that the response time for maintenance operations should be 24 hours (for critical breakdowns) and 72 hours (for minor breakdowns).

The effective availability of the Plant shall be calculated as follows:

- Monthly hours of production of the Plant (HP^m): It is the number of hours that the Plant has produced energy during month m. This variable is measured at the combiner box output, such as:

$$HP^m = \frac{\sum_{j=1}^{j=M} HP_j^m}{M}$$

Where:

  - M: number of combiner boxes of the Plant
  - HP_j^m: Number of hours that the combiner box j has produced energy during month m. This is a binary variable, calculated as follows:

    - $HP_j^m = \begin{cases} 1, if\ ECb_h^m > 0\ and\ GPOA_h^m > GPOA_{threshold} \\ 0 \quad otherwise \end{cases}$
    - With $ECb_{h,}^m$ being the energy produced by combiner box j during the interval of one hour, on the month m.

- Monthly hours of available irradiation ($HGPOA_i^m$): It is the monthly number of hours with plane of array irradiation greater than a minimum threshold of 300 W/m², minus the monthly number of hours of Excused Unavailability

$$HGPOA_i^m = \begin{cases} 1, if\ GPOA_h^m > GPOA_{threshold} \\ 0 \quad otherwise \end{cases}$$

Where:

  - $GPOA_h^m$: Plane of array irradiation specific during the interval of one hour, on the month m
  - $GPOA_{threshold}$: Plane of array irradiation threshold.

Availability the Plant (A^m) during each month m will then be calculated as follows:

$$A^m = \frac{HP^m}{HGPOA^m}$$

In annual terms, availability may be calculated as the average of the monthly overall availabilities of the Project, as follows:

$$A_{CBL} = \frac{\sum_{m=1}^{12} A^m}{12}$$

If the availability over the year i is below the Availability Guaranteed, Liquidated Damages will be payable to the Owner.

2. Irradiation Gain calculation.

The Contractor shall guarantee that the irradiation gain provided by the trackers installed at the solar plant for each operational year "i" from Substantial Completion ("$Gain_i$") will be at least equal to the $Gain_{Guaranteed}$

Where:

- $Gain_i$ is:

$$Gain_i = \frac{GPOAI_i - GHI_i}{GHI_i}$$

- $GPOAI_i$: is the global inclined irradiation measured by the inclined pyranometers installed at the Plant over the year i (kWh/m^2)
- GHI_i: is the global horizontal irradiation measured by the horizontal pyranometers installed at the Plant over year i (kWh/m^2).