ACM0002 Revision points

1) **Proposed clause as 11-A after clause 11 under 2.2 (Applicability)**

11-A: This methodology is applicable for all the projects supplying power to Utilities, Industrial and Commercial Consumers, irrespective of how the project is awarded to the developer.

Rationale: Since this methodology primarily deals with the technology and does not refer to the how the power is utilized, there has been instances where clarifications were sought about applicability of ACM0002 for specific type of consumers. Since this methodology focuses on the technical aspects, no restriction should be put on applicability on the basis of commercial arrangements between a power project developer and Consumer. **This suggestion stems from the fact that there are Group Captive projects, which are large scale, but are out of scope of every available Methodology**. Group Captive structure is unique model adopted in India where a number of smaller consumers are brought together by a developer and their consumption loads are consolidated to setup a larger plant. In this arrangement, the consumers are required to hold Some Equity in the plant, hence the name "Group Captive". Since, only a part of Equity is put up by Consumer, rest of the Equity is put by the Developer; and Developer is compensated by Consumer through PPA tariff. **The benefit of this arrangement is many-fold; One, the developer is able to setup a larger plant thus achieving some level of economies of scale in terms of plant operation; Two, smaller consumer don't have to invest entire project cost upfront and still they could reap the benefit of RE power. In absence of Group Captive structure, smaller consumers will have to arrange the entire equity on their own, plus debt would also be costlier. This will impede the adoption of RE.**

Since Group Captive consolidates the smaller consumers and paves the way for large plants, it should specifically be covered under ACM0002.

2) **Proposed clause (4. Definitions-)**

Wind Solar hybrid Project supplying "Round the clock" Power (doesn't include BESS) to grid – A hybrid renewable energy project with oversized Wind and Solar capacity and having deployed smart plant controllers to attain relatively firm Renewable Power and a higher annual PLF supplying power to the grid.

Rationale- Wind Solar technology is one of its kind, which deploys high end CAPEX by oversizing the overall project capacity. This maintains an overall grid balance with a relatively firm power compared to vanilla Solar/Wind Projects. Such projects are sustainable in nature compared to other storage systems as the project involves minimum wastage compared to storage systems which involve cyclic replacement of batteries. Penetrations of such technologies is still nascent in the developing nations like India, considering its high CAPEX and a highly competitive market with cutthroat ROE's. Such technologies require carbon financing for increased penetration in developing nations like India to boost overall penetration and system stability.

3) **Proposed New clause (31 b) Additionality) under (5.3.1)**

31. a Project activity that employs renewable energy using high investment technologies including (a) Floating Solar, (b) Green field Wind-solar project with BESS, (c) Wind-Solar hybrid projects supplying RTC power (without BESS) will be **auto additional**.

Rationale-

(i) Above (b) & (c) are varied technologies compared to the vanilla Wind/Solar projects. Such technologies manage the infirm nature of renewables with an optimal mix of different technologies. This will help the buyer/system operator plan their procurement optimally with firm renewable sources which minimizes the system operational cost as well help in decarbonization and overall grid stability.

(ii) Above (a) is one of its kind of technology which helps supplying renewable power in the regions where the land mass is constrained. It also conserves a lot of water by serving as a protective layer to evaporation of water.

Above technologies being different (new of its kind) are relative high investment cost compared to the standard Solar/Wind Project technologies available in the market . As such technologies are still in the nascent stage, they comfortably suffice the CDM principles of common practice, hence should be considered as auto additional in case the penetration level of project or technology in regional or national grid is less than 5%.

4) Proposed clause (31 c) Additionality) under (5.3.1)

Voluntary registries using CDM methodology to demonstrate additionality should consider evaluating project wise additionality irrespective of any geographical limitations, which otherwise hinders the registration of the projects in need of carbon financing.

Rationale

(i) Tariff & Geopolitical Risks

~80% of global energy needs are being met with fossil fuels including coal, oil and natural gas. Further, the best way to decarbonize is to cut down on the source itself and increase the contribution of renewable energy sources in the overall energy mix. To achieve the same, developing countries like India have set huge targets. Further, the country follows the competitive bidding mechanism to discover lower tariffs and minimize the overall power purchasing cost. However, certain challenges have been seen at the RE developer end, which lay on certain assumptions including input costs of key equipments like modules, steel, electrical equipments etc that are largely governed by International commodity prices. In the recent past due to geopolitical uncertainty several developers have taken into consideration carbon credit revenues, for making the projects financially viable. However, many voluntary registries have stopped accepting such projects by setting up geographical limitations. This had completely risked such projects, which had been established for goal of decarbonization

(ii) Climate Risk

In tropical geographies like India, the increasing seasonal variations have spiked the overall project life cycle costs by 1.1-1.3 times, leading to thinning IRR's against the one aspired during the project conceptualization for several large scale RE projects in India. Such conditions have now become very frequent in recent past and had almost impacted every Renewable energy project in India.

Further, such conditions have challenged the RE project developers and set them in a dilemma to add further projects.

While it is acknowledged globally that, the only faster way to decarbonize is to increase the share of renewable energy sources in the overall energy mix. It further needs to be acknowledged that faster addition of such project could only be possible with sustainable carbon financing through global Compliance/voluntary carbon markets. Historically it is seen that only RE projects qualifies as measurable through well metered source (with sound MRV systems). Hence, such a technology is a reliable decarbonization source and needs immense push on carbon financing front, irrespective of any geographical limitation. As the whole nature is one grid, the decarbonization in a particular geography impacts the nature as a whole and helps in limiting overall global temperature to desired levels.

Considering above, necessary directions be given to evaluate each project separately, irrespective of any geographical limitations.

Data and parameters monitored. (Clause 6.1)

Parameter table 15

Data / Parameter:	TEG_y
Data unit:	MWh/year
Description:	Total electricity produced by the project activity, including the electricity supplied to the grid and the electricity supplied to internal loads, in year *y*
Source of data:	Project activity site
Measurement procedures (if any):	Electricity meters
Monitoring frequency:	Continuous measurement and at least monthly recording
QA/QC procedures:	–
Any comment:	Applicable to hydro power project activities with a power density greater than 4 W/m^2 and less than or equal to 10 W/m^2 Single and multiple meters can be used in Wind Solar hybrid Project