



ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ಸಂಖ್ಯೆ: ಕೆಪಿಆರ್ ಸಿ/ಡಿಡಿ-4/ಜೈಅಯೋ/22/2020

ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಸಚಿವಾಲಯ,
ಬಹುಮಹಡಿ ಕಟ್ಟಡ,
ಬೆಂಗಳೂರು, ದಿನಾಂಕ:22.12.2020

ಇವರಿಂದ:

ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿ,
ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆ.

ಇವರಿಗೆ:

1. ರಾಜ್ಯದ ಎಲ್ಲಾ ಜಿಲ್ಲಾ ಪಂಚಾಯತ್‌ಗಳ ಮುಖ್ಯ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಧಿಕಾರಿಗಳು.
2. ರಾಜ್ಯದ ಎಲ್ಲಾ ತಾಲ್ಲೂಕು ಪಂಚಾಯತ್ ಕಾರ್ಯ ನಿರ್ವಾಹಕ ಅಧಿಕಾರಿಗಳು.
3. ರಾಜ್ಯದ ಎಲ್ಲಾ ಗ್ರಾಮ ಪಂಚಾಯತಿಗಳ ಪಂಚಾಯತಿ ಅಭಿವೃದ್ಧಿ ಅಧಿಕಾರಿಗಳು.

ಮಾನ್ಯರೇ,

ವಿಷಯ : 2020-21 ಮತ್ತು 2021-22ನೇ ಸಾಲಿಗೆ ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ /ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ ಅಧೀನ ಇಲಾಖೆಗಳು / ತಾಲ್ಲೂಕು ಪಂಚಾಯತ್ ಹಾಗೂ ಗ್ರಾಮ ಪಂಚಾಯತ್ ಗಳಲ್ಲಿ **Grid Interactive Hybrid Solar Rooftop Power Plants** ಗಳನ್ನು ಅಳವಡಿಸುವ ಕುರಿತಂತೆ ಮಾರ್ಗಸೂಚಿ.

ಪ್ರಸ್ತಾವನೆ.

ರಾಜ್ಯ ಸರ್ಕಾರವು ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತಿ ರಾಜ್ ಇಲಾಖೆಯ ವತಿಯಿಂದ ಪಂಚಾಯತ್ ರಾಜ್ ಸಂಸ್ಥೆಗಳ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಈಗಿರುವ ವಿದ್ಯುಚ್ಛಕ್ತಿ ಕೊರತೆಯನ್ನು ಹೋಗಲಾಡಿಸುವ ಸಲುವಾಗಿ ಸಾರ್ವಜನಿಕ ಉದ್ದೇಶಕ್ಕಾಗಿ ನೈಸರ್ಗಿಕವಾಗಿ ನಿರಂತರ ಲಭ್ಯವಿರುವ ಸೌರಮೂಲದಿಂದ ವಿದ್ಯುಚ್ಛಕ್ತಿಯನ್ನು ಪಡೆಯುವ ಸಲುವಾಗಿ ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆಯ ಅಧೀನದಲ್ಲಿ ಬರುವ ಸಂಸ್ಥೆಗಳ ಕಛೇರಿಗಳು / ಜಿಲ್ಲಾ ಪಂಚಾಯತ್‌ಗಳು ಹಾಗೂ ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ ಅಧೀನದಲ್ಲಿ ಬರುವ ಇಲಾಖಾ ಕಛೇರಿಗಳು / ತಾಲ್ಲೂಕು ಪಂಚಾಯತಿ ಹಾಗೂ ಗ್ರಾಮ ಪಂಚಾಯತಿ ಕಛೇರಿಗಳಿಗೆ **Grid Interactive Hybrid Solar Rooftop Power Plants** ಗಳನ್ನು ಅಳವಡಿಸಿ ಅದರಲ್ಲೂ ಪ್ರಮುಖವಾಗಿ ಗ್ರಾಮ ಪಂಚಾಯತಿಗಳ ವಿದ್ಯುಚ್ಛಕ್ತಿ ಬಿಲ್ಲಿನ ಮೊತ್ತ ದಲ್ಲಿ ಉಳಿತಾಯ ಮಾಡಿ ಆರ್ಥಿಕವಾಗಿ ಸದೃಢಗೊಳಿಸುವ ಸದುದ್ದೇಶದಿಂದ ಮತ್ತು ನಿರಂತರ ವಿದ್ಯುತ್ ಒದಗಿಸಲು ಕಾರ್ಯಕ್ರಮವನ್ನು ಪರಿಣಾಮಕಾರಿಯಾಗಿ ಅನುಷ್ಠಾನಗೊಳಿಸಲು ಮಹತ್ವದ ಈ ಯೋಜನೆಯನ್ನು ರೂಪಿಸಿದೆ.

1. ಕಾರ್ಯಕ್ರಮ ಅನುಷ್ಠಾನಕ್ಕಾಗಿ ಅನುದಾನದ ಕ್ರೋಢೀಕರಣ:

1.1. Grid Interactive Hybrid Solar Rooftop Power Plants ಗಳಿಗೆ ಕೇಂದ್ರ ಸರ್ಕಾರದ 15ನೇ ಹಣ ಕಾಸು ಆಯೋಗದ ಸೇರ್ಪಡೆ ಮಾರ್ಗಸೂಚಿ ಸಂಖ್ಯೆ ಗ್ರಾಅಪಂರಾ / 191 / ಜಿಪಸ/2020, ದಿನಾಂಕ 05-10-2020 ರನ್ವಯ ಜಿಲ್ಲಾ, ತಾಲ್ಲೂಕು, ಗ್ರಾಮ ಪಂಚಾಯತಿಗಳಲ್ಲಿ 15ನೇ ಹಣಕಾಸು ಆಯೋಗದ ಮೂಲ ಅನುದಾನದಡಿ

ಅಗತ್ಯತೆ ಆಧಾರದ ಮೇಲೆ ವಿದ್ಯುತ್ ಬಿಲ್ಲುಗಳನ್ನು ಕಡಿಮೆ ಮಾಡುವ ಉದ್ದೇಶದಿಂದ ಅಸಂಪ್ರದಾಯಕ ಇಂಧನ ಕಾರ್ಯಕ್ರಮವಾದ ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಉಪಕರಣಗಳನ್ನು ಅಳವಡಿಸಲು ಅವಕಾಶ ಕಲ್ಪಿಸಲಾಗಿದೆ.

- 1.2.** ಸರ್ಕಾರದ ಸೇರ್ಪಡೆ ಮಾರ್ಗಸೂಚಿ ಸಂಖ್ಯೆ ಗ್ರಾಅಪರಾ/206/ಜಿಪಸ/2020, ದಿನಾಂಕ 29.09.2020ರಲ್ಲಿ ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ ಅಭಿವೃದ್ಧಿ ಅನುದಾನ, ತಾಲ್ಲೂಕು ಪಂಚಾಯತಿ ಅಭಿವೃದ್ಧಿ ಅನುದಾನ ಮತ್ತು ತಾಲ್ಲೂಕು ಪಂಚಾಯತಿ ಅಧಿಭಾರ ಶಿಲ್ಪ ಹಾಗೂ ಇನ್ನಿತರೆ ಸಂಪನ್ಮೂಲಗಳಲ್ಲಿ ಲಭ್ಯವಿರುವ ಅನುದಾನವನ್ನು ಅಸಂಪ್ರದಾಯಕ ಇಂಧನ ಕಾರ್ಯಕ್ರಮಗಳನ್ನು ಅನುಷ್ಠಾನಗೊಳಿಸಲು ಶೇ.10 ರಿಂದ ಶೇ.20ರಷ್ಟು ಅನುದಾನವನ್ನು ವಿನಿಯೋಗಿಸುವಂತೆ ತಿಳಿಸಲಾಗಿದೆ.
- 1.3.** ಗ್ರಾಮ ಪಂಚಾಯತಿಗಳಲ್ಲಿ 15ನೇ ಹಣ ಕಾಸು ಯೋಜನೆಯಡಿ ಅಸಂಪ್ರದಾಯಕ ಇಂಧನ ಮೂಲಗಳ ಉಪಕರಣಗಳ ಅಳವಡಿಕೆಗೆ ಅವಕಾಶವನ್ನು ಕಲ್ಪಿಸಿರುವುದರಿಂದ 15ನೇ ಹಣಕಾಸು ಯೋಜನೆ, ಪಂಚಾಯತಿಗಳಲ್ಲಿ ಸಂಗ್ರಹವಾಗುವ ಆದಾಯ, ಅಭಿವೃದ್ಧಿ ಅನುದಾನ ಜಿಲ್ಲಾ / ತಾಲ್ಲೂಕು ಪಂಚಾಯತ್ ಅಧ್ಯಕ್ಷರುಗಳ ಅನಿರ್ಬಂಧಿತ ಅನುದಾನ, ಅಧಿಭಾರ ಶಿಲ್ಪ, ಕರ ವಸೂಲಿ, ರಾಜಸ್ವ ಮೂಲದ ಅನುದಾನ ಮಾನ್ಯ ಶಾಸಕರ, ಮಾನ್ಯ ಸಂಸದರ ಅಭಿವೃದ್ಧಿ ಅನುದಾನ, CSR ಅನುದಾನ, District Mineral Fund, ಹೈದರಾಬಾದ್ - ಕರ್ನಾಟಕ ಅಭಿವೃದ್ಧಿ ಮಂಡಳಿಯ ಅನುದಾನ ಮತ್ತು ವಿವಿಧ ಇಲಾಖೆಗಳಡಿ ಲಭ್ಯವಿರುವ ಅನುದಾನಗಳ ಸಂಯೋಜನೆಯೊಂದಿಗೆ ಒದಗಿಸಿಕೊಳ್ಳುವುದು, ಇತ್ಯಾದಿ ಸಂಪನ್ಮೂಲಗಳ ಕ್ರೋಢೀಕರಿಸುವಿಕೆಯಿಂದ ಸಂಗ್ರಹವಾಗುವ ಅನುದಾನದಲ್ಲಿ ಹಾಗೂ ಗ್ರಾಮ ಪಂಚಾಯತಿಗಳ ವಿದ್ಯುಚ್ಛಕ್ತಿ ಬಿಲ್ಲನ್ನು ಕಡಿಮೆಗೊಳಿಸುವ ನಿಟ್ಟಿನಲ್ಲಿ ಗ್ರಾಮ ಪಂಚಾಯತಿ ಕೇಂದ್ರ ಕಟ್ಟಡಗಳಿಗೆ ಅವಶ್ಯಕತೆ ಇರುವ ಸೋಲಾರ್ ವಿದ್ಯುಚ್ಛಕ್ತಿಯನ್ನು ಪಡೆಯುವ ಕುರಿತಂತೆ ಕ್ರಿಯಾ ಯೋಜನೆಯಲ್ಲಿ ಅವಕಾಶ ಕಲ್ಪಿಸಿಕೊಳ್ಳುವುದು.
- 1.4.** 2020-21ನೇ ಸಾಲಿಗೆ ಗ್ರಾಮ ಪಂಚಾಯತ್ ಹಾಗೂ ತಾಲ್ಲೂಕು ಪಂಚಾಯತ್‌ಗಳಲ್ಲಿ ಕೈಗೊಳ್ಳುವ ಕಾಮಗಾರಿಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಕ್ರಿಯಾ ಯೋಜನೆಯು ಅನುಮೋದಿತಗೊಂಡಲ್ಲಿ ಹೆಚ್ಚುವರಿಯಾಗಿ ಸೋಲಾರ್ ಘಟಕಗಳನ್ನು ಅಳವಡಿಸಿಕೊಳ್ಳಲು ಕ್ರಿಯಾ ಯೋಜನೆಯನ್ನು ಸಿದ್ಧಪಡಿಸಿ ಸಮುಚಿತವಾಗಿ ಅನುಮೋದಿಸಿಕೊಳ್ಳತಕ್ಕದ್ದು. ಯಾವುದಾದರೂ ಗ್ರಾಮ ಪಂಚಾಯತಿ / ತಾಲ್ಲೂಕು ಪಂಚಾಯತಿ / ಜಿಲ್ಲಾ ಪಂಚಾಯತಿಗಳಲ್ಲಿ 2020-21ರ ಸಾಲಿನಲ್ಲಿ ಅನುದಾನದ ಕೊರತೆ ಇದ್ದಲ್ಲಿ ಸೋಲಾರ್ ಘಟಕಗಳ ಕಾಮಗಾರಿಯನ್ನು 2020-21ರಲ್ಲಿ ಸೇರಿಸಿಕೊಂಡು, 2021-22ರಲ್ಲಿ ಮುಂದುವರೆದ ಕಾಮಗಾರಿ ಎಂದು ಪರಿಗಣಿಸಿ ಅನುದಾನ ಕಲ್ಪಿಸಿಕೊಳ್ಳಬಹುದಾಗಿದೆ.
- 1.5.** ಒಂದು ವೇಳೆ ಅನುಮೋದಿತಗೊಂಡ ಕ್ರಿಯಾ ಯೋಜನೆಯಲ್ಲಿ ಇದುವರೆವಿಗೂ ಪ್ರಾರಂಭವಾಗದೇ ಬಾಕಿ ಉಳಿದಿರುವ ಕಾಮಗಾರಿಗಳು ಇದ್ದಲ್ಲಿ ಈ ಕಾಮಗಾರಿಗಳ ಅಗತ್ಯತೆ ಕುರಿತಂತೆ ಪರಿಶೀಲಿಸಿ ಅನಗತ್ಯವೆಂದು ಕಂಡುಬಂದಲ್ಲಿ ಈ ಕಾಮಗಾರಿಗಳ ಬದಲಾಗಿ ಸೋಲಾರ್ ಕಾಮಗಾರಿಗಳಿಗೆ ಕ್ರಿಯಾ ಯೋಜನೆಯನ್ನು ಸಿದ್ಧಪಡಿಸಿ ಅನುಮೋದಿಸಿಕೊಳ್ಳತಕ್ಕದ್ದು. ಈ ಕ್ರಿಯಾಯೋಜನೆಯಲ್ಲಿ ಘಟಕಗಳ ಅನುಷ್ಠಾನಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಮೊತ್ತ ಮತ್ತು CMC ಮೊತ್ತವನ್ನು ಒಳಗೊಂಡಿರಬೇಕು.
- 1.6.** ಮುಂದುವರೆದು ಅನುಮೋದಿತ ಕ್ರಿಯಾ ಯೋಜನೆಯಲ್ಲಿ ಅನುಮೋದಿತ ಕಾಮಗಾರಿಗಳಲ್ಲಿ ಯಾವುದಾದರೂ ಕಾಮಗಾರಿಗಳ ಅಗತ್ಯತೆ ಇಲ್ಲದಿದ್ದಲ್ಲಿ ಇದನ್ನು ಹೊರತುಪಡಿಸಿ ಸೋಲಾರ್ ಕಾಮಗಾರಿಗಳಿಗೆ ಕ್ರಿಯಾ ಯೋಜನೆಯನ್ನು ಸಿದ್ಧಪಡಿಸಿ ಅನುಮೋದನೆ ಪಡೆಯತಕ್ಕದ್ದು.

2. ನೋಡಲ್ ಅಧಿಕಾರಿಗಳು:

- 2.1. Grid Interactive Hybrid Solar Rooftop Power Plants (GIHRSP) ಯೋಜನೆಯನ್ನು ಸಮರ್ಪಕವಾಗಿ, ಯಶಸ್ವಿಯಾಗಿ ಕಾಲಮಿತಿಯೊಳಗೆ ಅನುಷ್ಠಾನಗೊಳಿಸಲು ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ ನ ಉಪ ಕಾರ್ಯದರ್ಶಿ ಮಟ್ಟದ ಅಧಿಕಾರಿ ಒಬ್ಬರನ್ನು ನೋಡಲ್ ಅಧಿಕಾರಿ ಎಂದು ನೇಮಿಸಿಕೊಳ್ಳಲು ಸೂಚಿಸಿದೆ ಹಾಗೂ ಹಾಗೇ ನೇಮಿಸಿಕೊಂಡ ನೋಡಲ್ ಅಧಿಕಾರಿಯ ಹೆಸರು, ಪದನಾಮ ಇತ್ಯಾದಿ ವಿವರಗಳನ್ನು ಆಯುಕ್ತರಿಗೆ ತಿಳಿಸಲು ಸೂಚಿಸಿದೆ.
- 2.2. ಯೋಜನೆಯ ನೋಡಲ್ ಅಧಿಕಾರಿಗಳು ಜಿಲ್ಲಾ / ತಾಲ್ಲೂಕು / ಗ್ರಾಮ ಪಂಚಾಯತ್‌ಗಳ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳೊಂದಿಗೆ ಸಮನ್ವಯ ಸಾಧಿಸುವಿಕೆ ಮತ್ತು ಸರ್ಕಾರದ ಆರ್ಥಿಕ ಸಂಹಿತೆಯನ್ನು ಪಾಲಿಸುವಿಕೆಯೊಂದಿಗೆ ಯೋಜನೆಯನ್ನು ಪರಿಣಾಮಕಾರಿಯಾಗಿ ಅನುಷ್ಠಾನಗೊಳಿಸುವುದು.
- 2.3. ತಾಲ್ಲೂಕು ಮಟ್ಟದಲ್ಲಿ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಧಿಕಾರಿಗಳನ್ನು ತಾಲ್ಲೂಕು ಮಟ್ಟದ ನೋಡಲ್ ಅಧಿಕಾರಿಯಾಗಿ ನೇಮಿಸಿದೆ.
- 2.4. ತಾಲ್ಲೂಕು ಮಟ್ಟದ ನೋಡಲ್ ಅಧಿಕಾರಿಯವರು ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ ಮತ್ತು ಗ್ರಾಮ ಪಂಚಾಯತ್‌ಗಳ ಮಧ್ಯೆ ಸಮನ್ವಯ ಸಾಧಿಸುವುದು ಕಾಲಮಿತಿಯೊಳಗೆ ಯೋಜನೆಯನ್ನು ಅನುಷ್ಠಾನಗೊಳಿಸುವ ಜವಾಬ್ದಾರಿ ಹೊಂದಿರುತ್ತಾರೆ.

3. ಪಂಚಾಯತ್ ರಾಜ್ ಸಂಸ್ಥೆಗಳ ಕಛೇರಿಗಳಿಗೆ ಅಳವಡಿಸುವ ಕಛೇರಿವಾರು ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಘಟಕ ಸಾಮರ್ಥ್ಯದ ವಿವರ.

ಪಂಚಾಯತ್ ರಾಜ್ ಸಂಸ್ಥೆಗಳಾದ ಜಿಲ್ಲಾ ಪಂಚಾಯತನಲ್ಲಿ ಕನಿಷ್ಠ 15 ಕಿ.ವ್ಯಾಟ್, ತಾಲ್ಲೂಕು ಪಂಚಾಯತ ಗಳಲ್ಲಿ ಕನಿಷ್ಠ 10 ಕಿ.ವ್ಯಾಟ್, ಮತ್ತು ಗ್ರಾಮ ಪಂಚಾಯತಗಳಲ್ಲಿ ಕನಿಷ್ಠ 3 ಕಿ.ವ್ಯಾಟ್ ಸಾಮರ್ಥ್ಯದ Grid Interactive Hybrid Solar Rooftop Power Plant ಘಟಕವನ್ನು ಅಳವಡಿಸಬಹುದು ಎಂದು ಅಂದಾಜಿಸಲಾಗಿದೆ. ಆದರೂ ಅವಶ್ಯಕತೆಗೆ ಅನುಗುಣವಾಗಿ ಪಂ.ರಾಜ್ ಸಂಸ್ಥೆಗಳ ಕಟ್ಟಡಗಳ ಮೇಲ್ಭಾಗವನ್ನು ವಿಸ್ತೀರ್ಣಕ್ಕೆ ಹಾಗೂ ಲಭ್ಯವಿರುವ ಅನುದಾನಕ್ಕೆ ಅನುಗುಣವಾಗಿ ಹೆಚ್ಚಿನ ಅಥವಾ ಕಡಿಮೆ ಸಾಮರ್ಥ್ಯದ ಘಟಕ ಗಳನ್ನು ಸ್ಥಾಪಿಸಿ ಕೊಳ್ಳಬಹುದಾಗಿದೆ.

ಈ ಕೆಳಗಿನ Table ನಲ್ಲಿನ ಪ್ರಮಾಣಗಳನ್ನು ಸೂಚ್ಯ (Advisory) ಎಂದು ಪರಿಗಣಿಸುವುದು.

ಕ್ರ. ಸಂ	ಪಂ.ರಾಜ್ ಸಂಸ್ಥೆಗಳು	Installation of <u>Grid Interactive Hybrid Solar Rooftop Power Plants</u>	
		ಕನಿಷ್ಠ ಸಾಮರ್ಥ್ಯ	ಗರಿಷ್ಠ ಸಾಮರ್ಥ್ಯ
1	ಜಿಲ್ಲಾ ಪಂಚಾಯತ್	15 ಕಿ.ವ್ಯಾಟ್	ಮೇಲ್ಭಾಗವನ್ನು ವಿಸ್ತೀರ್ಣ, ಲಭ್ಯವಿರುವ ಅನುದಾನ ಹಾಗೂ ಅವಶ್ಯಕತೆಗೆ ಅನುಗುಣವಾಗಿ ಅಳವಡಿಸುವುದು.
2	ತಾಲ್ಲೂಕು ಪಂಚಾಯತ್	10 ಕಿ.ವ್ಯಾಟ್	
3	ಗ್ರಾಮ ಪಂಚಾಯತ್	03 ಕಿ.ವ್ಯಾಟ್	

4. ಗುತ್ತಿಗೆದಾರರು ಮತ್ತು ಜಿಲ್ಲಾವಾರು ಹಂಚಿಕೆ ವಿವರ.

ಈ ಕಾರ್ಯಕ್ರಮದ ಪ್ರಯೋಜನವನ್ನು ಸಾರ್ವಜನಿಕರಿಗೆ ತಲುಪಿಸುವ ನಿಟ್ಟಿನಲ್ಲಿ 2020-21 ಮತ್ತು 2021-22 ನೇ ಆರ್ಥಿಕ ಸಾಲಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ Grid interactive Hybrid Solar Rooftop Power plants ಅಳವಡಿಸುವ ಕುರಿತಂತೆ ಇ-ಟೆಂಡರ್‌ನಲ್ಲಿ ಯಶಸ್ವಿಯಾದ ಗುತ್ತಿಗೆದಾರರುಗಳ ವಿವರ ಮತ್ತು ಜಿಲ್ಲಾವಾರು ಹಂಚಿಕೆ ವಿವರಗಳು ಕೆಳಕಂಡಂತಿದೆ.

ಕ್ರಮ ಸಂಖ್ಯೆ	ಗುತ್ತಿಗೆದಾರ ಸಂಸ್ಥೆಗಳು	ಹಂಚಿಕೆಯಾದ ಜಿಲ್ಲೆ.
1	ಮೆ: ಗ್ರೀನ್ ಸೋಲ್ ರಿನಿವಬಲ್ ಎನರ್ಜಿ ಪ್ರೈ ಲಿ., #28A, 2 nd Phase, ಪೀಣ್ಯ ಕೈಗಾರಿಕಾ ಪ್ರದೇಶ, ಬೆಂಗಳೂರು-58.	ಬೀದರ್, ಮಂಡ್ಯ.
2	ಮೆ: ಇಂಕೆಲ್ ಲಿಮಿಟೆಡ್, 7/473 ZA-5&6, ಅಲಿಯಾಲ ಕಾಂಪ್ಲೆಕ್ಸ್, ಪೋಸ್ಟ್ ಆಫೀಸ್ ರಸ್ತೆ, ಕಕ್ಕನಾಡ, ಕೊಚಿನ್-682030.	ಚಿತ್ರದುರ್ಗ, ಕೊಪ್ಪಳ, ಗದಗ, ಹಾಸನ, ಶಿವಮೊಗ್ಗ,ಯಾದಗಿರ್, ಕೊಡಗು, ಬಳ್ಳಾರಿ.
3	ಮೆ: ನ್ಯೂಟೆಕ್ ಸೋಲಾರ್ ಸಿಸ್ಟಮ್ಸ್, #5, ಬಿ.ಎಂ. ಶಂಕರಪ್ಪ ಕೈಗಾರಿಕೆ ಎಸ್ಟೇಟ್, ಸುಂಕದಕಟ್ಟೆ, ಬೆಂಗಳೂರು-91	ಬೆಂಗಳೂರು ಗ್ರಾಮಾಂತರ. ರಾಮನಗರ, ಕಲಬುರ್ಗಿ,ತುಮಕೂರು, ಉಡುಪಿ. ಧಾರವಾಡ, ಹಾವೇರಿ, ಚಾಮರಾಜನಗರ,
4	ಮೆ: ಪವರ್-ವನ್ ಮೈಕ್ರೋ ಸಿಸ್ಟಮ್ಸ್ ಪ್ರೈ.ಲಿ., GF-3&12, KSSIDC ಬಹುಮಹಡಿ ಕಟ್ಟಡ, 5ನೇ ಅಡ್ಡರಸ್ತೆ, ಪೀಣ್ಯ ಕೈಗಾರಿಕಾ ಎಸ್ಟೇಟ್, ಬೆಂಗಳೂರು-58.	ಬೆಂಗಳೂರು ನಗರ, ದಕ್ಷಿಣ ಕನ್ನಡ , ಮೈಸೂರು, ವಿಜಯಪುರ, ಚಿಕ್ಕಬಳ್ಳಾಪುರ, ಬಾಗಲಕೋಟೆ, ರಾಯಚೂರು, ಉತ್ತರಕನ್ನಡ. ದಾವಣಗೆರೆ, ಬೆಳಗಾವಿ.
5	ಮೆ: ಸವಿತ್ರ ಸೋಲಾರ್ ಪ್ರೈ.ಲಿ., Sy.No.374, P.No.34/1, C.I.E., ಗಾಂಧೀ ನಗರ, ಪೇಸ್--11, ಹೈದರಾಬಾದ್-500037.	ಚಿಕ್ಕಮಗಳೂರು, ಕೋಲಾರ

5. ಟೆಂಡರ್ ಅಂಗೀಕಾರ ಪ್ರಾಧಿಕಾರ ಮತ್ತು ಸಮಾಲೋಚನಾ ಸಮಿತಿಯಿಂದ ಪ್ರಾಕ್ಟೀಜ್‌ವಾರು ಮತ್ತು ಐಟಂವಾರು ಅನುಮೋದಿಸಲಾದ L1 ದರಗಳ ವಿವರ (GST ಸೇರಿದಂತೆ) ಈ ಕೆಳಗಿನಂತಿದೆ:

ಕ್ರ. ಸಂ	Package ಪ್ರಾಕ್ಟೀಜ್	ಕೆಲಸದ ವಿವರ	ಘಟಕ L1 ದರಗಳು ರೂ.ಗಳಲ್ಲಿ ಎಲ್ಲಾ ತೆರಿಗೆಗಳನ್ನೊಳಗೊಂಡಂತೆ (inclusive of GST)			
			Package with 1 hour backup		Package with 2 hour backup	
			ಘಟಕ ದರ	*CMC ದರ (5 ವರ್ಷದ Warranty ಅವಧಿ ನಂತರ)	ಘಟಕದರ	*CMC ದರ (5 ವರ್ಷದ Warranty ಅವಧಿ ನಂತರ)
1	A - 1KW 1Hour, B - 2Hour	Supply, Installation,	1,99,000	55,000	2,08,000	68,000
2	C - 2 KW 1Hour, D - 2Hour	Netmetering,	3,30,000	1,35,000	3,60,000	1,39,000
3	E - 3 KW 1Hour, F - 2Hour	Testing,	4,65,000	1,65,000	4,98,000	1,70,000
4	G - 4 KW 1Hour, H - 2Hour	Commissioning,	6,00,000	1,90,000	6,50,000	2,00,000
5	I - 5 W 1Hour, J - 2Hour	Maintenance and	7,00,000	2,00,000	7,70,000	2,10,000
6	K - 10 KW 1Hour, L - 2Hour	Operations of Grid Interactive Hybrid	13,90,000	2,50,000	14,65,000	2,65,000
7	A - 1KW 1Hour, B - 2Hour		1,99,000	55,000	2,08,000	68,000

8	C – 2 KW 1Hour, D- 2Hour	Solar Rooftop	3,30,000	1,35,000	3,60,000	1,39,000
9	E – 3 KW 1Hour, F - 2Hour	Power Plant with	4,65,000	1,65,000	4,98,000	1,70,000
10	G –4 KW 1Hour, H - 2Hour	5 years warranty	6,00,000	1,90,000	6,50,000	2,00,000
11	I – 5 W 1Hour, J - 2Hour	(including battery)	7,00,000	2,00,000	7,70,000	2,10,000
12	K –10 KW 1Hour, L - 2Hour		13,90,000	2,50,000	14,65,000	2,65,000

(*) **CMC=Comprehensive Maintenance Contract** from 6th to 10th year, excluding battery replacement. {After completion of 5 years of Warranty period}.

6. ಕಾರ್ಯಕ್ರಮ ಅನುಷ್ಠಾನ ವಿಧಾನ:

- 6.1 ಗುತ್ತಿಗೆದಾರರಿಗೆ LOA ವಿತರಿಸಿದ ಅರುವತ್ತು ದಿನಗಳೊಳಗಾಗಿ, ಗುತ್ತಿಗೆದಾರರು ತಮಗೆ ಹಂಚಿಕೆ ಮಾಡಲಾಗಿರುವ ಜಿಲ್ಲೆಗಳ ಕಚೇರಿಗಳಿಗೆ ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಘಟಕ ಅಳವಡಿಸಲು ಸ್ಥಾನಿಕ ಸಮೀಕ್ಷೆ ಕೈಗೊಂಡು ಹಾಲಿ ಕಚೇರಿಗೆ ಮಂಜೂರಾಗಿರುವ ವಿದ್ಯುತ್ ಸಾಮರ್ಥ್ಯದ ವಿವರವನ್ನು ಒಳಗೊಂಡಂತೆ Site survey report (ಅನುಬಂಧ-1) ಭರ್ತಿ ಮಾಡಿದ ಪ್ರತಿಯನ್ನು ಅನುಷ್ಠಾನಾಧಿಕಾರಿ ಹಾಗೂ ಜಿಲ್ಲಾ ನೋಡಲ್ ಅಧಿಕಾರಿಗಳಿಗೆ ಸಲ್ಲಿಸತಕ್ಕದ್ದು.
- 6.2 ಗುತ್ತಿಗೆದಾರರು ಸಲ್ಲಿಸಿರುವ ಸೈಟ್ ಸರ್ವೆ ವರದಿಯನ್ನಯ ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆ ಹಾಗೂ ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ ಅಧೀನ ಕಚೇರಿಗಳ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು ಅನುದಾನದ ಲಭ್ಯತೆ, ಮೇಲ್ವಿಚಾರಣೆ ವಿಸ್ತೀರ್ಣ ಹಾಗೂ ಕಚೇರಿಯ ದೈನಂದಿನ ಕೆಲಸಕ್ಕೆ ಅಗತ್ಯವಿರುವ ವಿದ್ಯುತ್ ಸಾಮರ್ಥ್ಯಕ್ಕೆ ಅನುಗುಣವಾಗಿ ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಘಟಕ ಅಳವಡಿಸಲು Site survey report ಸ್ವೀಕೃತಗೊಂಡ ಹದಿನೈದು ದಿನಗಳೊಳಗಾಗಿ ನಿಗದಿತ ನಮೂನೆ (ಅನುಬಂಧ-2) ಯಲ್ಲಿ ಕಾರ್ಯಾದೇಶ ನೀಡುವುದು.
- 6.3 ಅನುಷ್ಠಾನಾಧಿಕಾರಿಯು ಕಚೇರಿಯ ಕಂಪ್ಯೂಟರ್, ಪ್ರಿಂಟರ್, ಸ್ಕ್ಯಾನರ್, ಜೆರಾಕ್ಸ್ ಯಂತ್ರ, ಫ್ಯಾನ್ ಗಳು, ಲೈಟಿಂಗ್ ವ್ಯವಸ್ಥೆ, ಬಾಪೂಜಿ ಸೇವಾ ಕೇಂದ್ರ, ಕಚೇರಿ ಆವರಣದಲ್ಲಿರುವ ಬೀದಿ ದೀಪಗಳಿಗೆ, ಶುದ್ಧ ಕುಡಿಯುವ ನೀರಿನ ಘಟಕ, ಕೊಳವೆ ಬಾವಿ ಅಥವಾ ನೀರಿನ ತೊಟ್ಟಿಯಿಂದ ನೀರೆತ್ತುವ ಪಂಪ್ ಗಳಿಗೆ ಮತ್ತು ಬೀದಿ ದೀಪ ಅಳವಡಿಸಲು ಹಾಗೂ ಇತರ ಅವಶ್ಯಕ ಉದ್ದೇಶಗಳಿಗೆ ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಒದಗಿಸಿ ಕೊಡತಕ್ಕದ್ದು.
- 6.4 ಕಚೇರಿಗಳಿಗೆ ಈಗಾಗಲೇ On Grid / Off Grid Solar Plant ಅಳವಡಿಸಿಕೊಂಡಿದ್ದಲ್ಲಿ ಅಂಥ ಸ್ಥಳಗಳಲ್ಲಿ ಅವಶ್ಯಕತೆಗನುಗುಣವಾಗಿ ಹೆಚ್ಚುವರಿ ಸಾಮರ್ಥ್ಯದ ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಘಟಕವನ್ನು ಅಳವಡಿಸಲು ಕ್ರಮ ವಹಿಸುವುದು ಹಾಗೂ ESCOM ನಿಂದ ಹೆಚ್ಚುವರಿ ವಿದ್ಯುತ್ ಸಾಮರ್ಥ್ಯದ ಮಂಜೂರಾತಿ ಪಡೆಯಲು ನಿಗದಿತ ನಮೂನೆಯಲ್ಲಿ ಅರ್ಜಿ ಸಲ್ಲಿಸಿ ಮಂಜೂರಾತಿ ಪಡೆಯತಕ್ಕದ್ದು.
- 6.5 ಗುತ್ತಿಗೆದಾರರು ತಮ್ಮ ಸಂಸ್ಥೆಗೆ ಹಂಚಿಕೆಯಾದ ಜಿಲ್ಲೆಗಳಲ್ಲಿ ದೂರು ನಿರ್ವಹಣೆ ಕಾಮಗಾರಿ ಅನುಷ್ಠಾನ ಹಾಗೂ ಅಗತ್ಯ ಸೇವೆಗಳನ್ನು ನೀಡುವ ಸಲುವಾಗಿ ಜಿಲ್ಲಾ ಸೇವಾ ಕೇಂದ್ರವನ್ನು ಸ್ಥಾಪಿಸಿ ಸೇವಾಕೇಂದ್ರದ ವಿವರವನ್ನು ಜಿಲ್ಲಾ ನೋಡಲ್ ಅಧಿಕಾರಿಗಳಿಗೆ ಹಾಗೂ ಇಲಾಖೆಯ ಎಲ್ಲ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳಿಗೆ ಸಲ್ಲಿಸತಕ್ಕದ್ದು.
- 6.6 ಕಾರ್ಯಾದೇಶ ನೀಡಿದ 15 ದಿನಗಳೊಳಗಾಗಿ ಗುತ್ತಿಗೆದಾರರು ಕಾರ್ಯಾದೇಶದಲ್ಲಿ ನೀಡಿರುವ ಮೊತ್ತದ 5% ಕ್ಕೆ Bank guarantee (ಅನುಬಂಧ-3) ಸಲ್ಲಿಸಿ, ಅನುಷ್ಠಾನ ಅಧಿಕಾರಿಗಳೊಂದಿಗೆ ನಿಗದಿತ ನಮೂನೆ (ಅನುಬಂಧ-4) ಯಲ್ಲಿ ರೂ. 100/- ಗಳ ಛಾಪಾ ಕಾಗದದ ಮೇಲೆ ಕರಾರು ಒಪ್ಪಂದ ಮಾಡಿಕೊಳ್ಳತಕ್ಕದ್ದು.

- 6.7 ಕಾರ್ಯಾದೇಶ ನೀಡಿದ ತರುವಾಯ, ಕಚೇರಿಗೆ ಮಂಜೂರಾಗಿರುವ ವಿದ್ಯುತ್ ಸಾಮರ್ಥ್ಯವು ಕಡಿಮೆ ಇದ್ದಲ್ಲಿ ಮೇಲ್ವರ್ಗೀಕರಿಸಲು, ನೆಟ್ ಮೀಟರ್ ಅಳವಡಿಸಲು ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು ESCOM ಸಂಸ್ಥೆಗೆ ನಿಗದಿತ ಶುಲ್ಕ ಪಾವತಿಸಿ ಅರ್ಜಿ ಸಲ್ಲಿಸತಕ್ಕದ್ದು ಮತ್ತು ವಿದ್ಯುತ್ ಖರೀದಿ ಒಡಂಬಡಿಕೆಯನ್ನು ಅನುಷ್ಠಾನ ಪೂರ್ವದಲ್ಲಿಯೇ ಮಾಡಿಕೊಳ್ಳತಕ್ಕದ್ದು.
- 6.8 ಗುತ್ತಿಗೆದಾರರು ಸಲ್ಲಿಸಿರುವ Site survey ವರದಿಗಳನ್ನು ಜಿಲ್ಲಾ ನೋಡಲ್ ಅಧಿಕಾರಿಗಳು ಕ್ರೋಡೀಕರಿಸಿ ವರದಿಯನ್ನು ವಿಳಂಬಕ್ಕೆ ಆಸ್ಪದ ನೀಡದೆ ಸರ್ಕಾರಕ್ಕೆ ಸಲ್ಲಿಸತಕ್ಕದ್ದು
- 6.9 ಗುತ್ತಿಗೆದಾರರು Pre dispatch inspection ಕೈಗೊಳ್ಳುವಂತೆ ಕೋರಿ ಇಲಾಖೆಗೆ ಸಲ್ಲಿಸುವ ಪತ್ರವು ಸ್ವೀಕೃತಗೊಂಡ 21 ದಿನಗಳೊಳಗಾಗಿ Pre dispatch inspection committee ಯು ಸಮೀಕ್ಷೆ ಕೈಗೊಂಡು ವರದಿ ನೀಡತಕ್ಕದ್ದು.
- 6.10 ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು ನೀಡಿರುವ ಆದೇಶದನ್ವಯ ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಘಟಕ ಸಾಮಗ್ರಿಗಳನ್ನು ಕಾಮಗಾರಿಯ ಸ್ಥಳಕ್ಕೆ ವಿತರಣೆ ಮಾಡಿ ತ್ರಿಪ್ರತಿಯಲ್ಲಿ BOQ ಮತ್ತು invoice ಸಲ್ಲಿಸತಕ್ಕದ್ದು ಹಾಗೂ ಗುತ್ತಿಗೆದಾರರು ತಮಗೆ ಹಂಚಿಕೆ ಮಾಡಲಾಗಿರುವ ಜಿಲ್ಲಾವಾರು ಸಾಮರ್ಥ್ಯದ 25% ರಷ್ಟು ಸೋಲಾರ್ ಘಟಕಗಳನ್ನು ಸರಬರಾಜು ಮಾಡಿದ ತರುವಾಯ, ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಘಟಕದ ಸಾಮಗ್ರಿಗಳನ್ನು BOQ ಅನ್ವಯ ಸಮೀಕ್ಷೆ ಕೈಗೊಳ್ಳಲು ಜಿಲ್ಲಾ ನೋಡಲ್ ಅಧಿಕಾರಿಗಳಿಗೆ ಪತ್ರ ಸಲ್ಲಿಸತಕ್ಕದ್ದು. ಗುತ್ತಿಗೆದಾರರ ಪತ್ರ ಸ್ವೀಕೃತಗೊಂಡ 15 ದಿನಗಳೊಳಗಾಗಿ ಜಿಲ್ಲಾ ಪಂಚಾಯತ ಗ್ರಾಮೀಣ ಇಂಧನ ಕಾರ್ಯಕ್ರಮದ ಯೋಜನಾ ಅಭಿಯಂತರರು ಹಾಗೂ ಅನುಷ್ಠಾನ ಅಧಿಕಾರಿಗಳು ಉಪಕರಣಗಳ ಸುಸ್ಥಿತಿ ಮತ್ತು ಗುಣಮಟ್ಟದ ಬಗ್ಗೆ ಜಂಟಿಯಾಗಿ ತಪಾಸಣೆ ನಡೆಸಿ ನಿಗದಿತ ನಮೂನೆ (ಅನುಬಂಧ-5) ರಲ್ಲಿ ಭರ್ತಿ ಮಾಡಿ ಜಂಟಿಯಾಗಿ ದೃಢೀಕರಿಸತಕ್ಕದ್ದು.
- 6.11 ಜಂಟಿ ತಪಾಸಣಾ ವರದಿ ಅನ್ವಯ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಯು ಮೊದಲನೇ ಹಂತದಲ್ಲಿ (Stage-1) ಕಾರ್ಯಾದೇಶ ಮೌಲ್ಯದ 80% ರಷ್ಟನ್ನು Bill ಸಲ್ಲಿಕೆಯಾದ 30 ದಿನಗಳೊಳಗಾಗಿ ಗುತ್ತಿಗೆದಾರರಿಗೆ ನಿಯಮಾನುಸಾರ ಪಾವತಿಸಲು ಕ್ರಮ ಕೈಗೊಳ್ಳತಕ್ಕದ್ದು.
- 6.12 ಗುತ್ತಿಗೆದಾರರು ಕಾರ್ಯಾದೇಶ ಪಡೆದ ದಿನಾಂಕದಿಂದ ಕನಿಷ್ಠ 1ತಿಂಗಳು ಮತ್ತು ಗರಿಷ್ಠ 6ತಿಂಗಳೊಳಗಾಗಿ ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಸ್ಥಾವರವನ್ನು ಅಳವಡಿಸಿ ESCOM ಸಂಸ್ಥೆಯಿಂದ ಗ್ರಿಡ್ ನೊಂದಿಗೆ ಸಿಂಕ್ರೊನೈಸ್ ಮಾಡಿಸಿ ಕಾರ್ಯಾರಂಭ ಮಾಡುವುದು ಕಡ್ಡಾಯವಾಗುತ್ತದೆ.
- 6.13 ಗುತ್ತಿಗೆದಾರರು ತಮಗೆ ಜಿಲ್ಲಾವಾರು ಹಂಚಿಕೆ ಮಾಡಲಾದ ಸಾಮರ್ಥ್ಯದ ಶೇಕಡಾ ಇಪ್ಪತ್ತೈದರಷ್ಟು ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಸ್ಥಾವರ ಅಳವಡಿಸಿದ ನಂತರ 3rd ಪಾರ್ಟಿ ಸಮೀಕ್ಷೆ ಕೈಗೊಳ್ಳುವಂತೆ ಕೋರಿ ಜಿಲ್ಲಾ ನೋಡಲ್ ಅಧಿಕಾರಿಯವರಿಗೆ ಪತ್ರ ಸಲ್ಲಿಸತಕ್ಕದ್ದು.
- 6.14 ಗುತ್ತಿಗೆದಾರರಿಂದ 3rd ಪಾರ್ಟಿ ಸಮೀಕ್ಷೆ ಕೈಗೊಳ್ಳುವಂತೆ ಕೋರಿ ಸಲ್ಲಿಸಲಾದ ಪತ್ರ ಮತ್ತು Completion report ಸ್ವೀಕೃತಗೊಂಡ ದಿನಾಂಕದಿಂದ 30 ದಿನಗಳೊಳಗಾಗಿ 3rd Party ಸಮೀಕ್ಷೆ ಕೈಗೊಂಡು ನಿಗದಿತ ನಮೂನೆ (ಅನುಬಂಧ-6) ಯಲ್ಲಿ ಭರ್ತಿ ಮಾಡಿದ Completion report ಗಳನ್ನು ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳಿಗೆ ಮತ್ತು ಜಿಲ್ಲಾ ನೋಡಲ್ ಅಧಿಕಾರಿಗಳಿಗೆ ಸಲ್ಲಿಸತಕ್ಕದ್ದು.
- 6.15 3rd party Inspection ತಂಡದವರು ಸಲ್ಲಿಸಿರುವ ವರದಿಯ ಅನುಸಾರ ಮತ್ತು ಸ್ಥಾವರಗಳು ಸಮರ್ಪಕವಾಗಿ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿರುವ ಬಗ್ಗೆ ದೃಢಪಡಿಸಿಕೊಂಡು ಗುತ್ತಿಗೆದಾರರಿಗೆ ಎರಡನೇ ಮತ್ತು ಅಂತಿಮ ಹಂತದ 20%ರಷ್ಟು ಕಾಮಗಾರಿಯ ಬಿಲ್ ಮೊತ್ತವನ್ನು ಪಾವತಿಸಲು ನಿಯಮಾನುಸಾರ ಪರಿಶೀಲಿಸಿ ಪಾವತಿಸಲು ಕ್ರಮ ವಹಿಸತಕ್ಕದ್ದು.

- 6.16 ಗ್ರಿಡ್ ನೊಂದಿಗೆ ಸಿಂಕ್ರನೈಸ್ ಮಾಡುವ ಕಾರ್ಯವು ವಿಳಂಬವಾದಲ್ಲಿ ಕಾರ್ಯಾದೇಶ ಮೊತ್ತದ 5% ರಷ್ಟು ಹೆಚ್ಚುವರಿ ಮೊತ್ತಕ್ಕೆ ಗುತ್ತಿಗೆದಾರರಿಂದ Bank guarantee ಪಡೆದು ಅಂತಿಮ ಹಂತದ 20% ರಷ್ಟು ಕಾಮಗಾರಿಯ ಬಿಲ್ ಮೊತ್ತವನ್ನು ಪಾವತಿಸಲು ನಿಯಮಾನುಸಾರ ಪರಿಶೀಲಿಸಿ ಕ್ರಮ ಕೈಗೊಳ್ಳತಕ್ಕದ್ದು.
- 6.17 ಗ್ರಿಡ್ ನೊಂದಿಗೆ ಸಿಂಕ್ರನೈಸ್ ಆಗಿರುವ ಬಗ್ಗೆ ಗುತ್ತಿಗೆದಾರರು ಸಲ್ಲಿಸುವ ಪತ್ರವು ಸ್ವೀಕೃತಗೊಂಡ ನಂತರ ದೃಢಪಡಿಸಿಕೊಂಡು ಗುತ್ತಿಗೆದಾರರಿಂದ ಹೆಚ್ಚುವರಿಯಾಗಿ ಸಂಗ್ರಹಿಸಲಾಗಿದ್ದ 5% ರ Bank guarantee ಯನ್ನು ಗುತ್ತಿಗೆದಾರರಿಗೆ ಹಿಂದಿರುಗಿಸಲು ಕ್ರಮ ಕೈಗೊಳ್ಳತಕ್ಕದ್ದು.
- 6.18 Pre dispatch inspection, 3rd party inspection ಹಾಗೂ Net meter ಅಳವಡಿಕೆಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಪಾವತಿಸಬೇಕಾದ ಮೊತ್ತವನ್ನು ಸಂಬಂಧಿಸಿದ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳೇ ಭರಿಸತಕ್ಕದ್ದು.
- 6.19 ಸೋಲಾರ್ ಸ್ಥಾವರಗಳಿಗೆ ಸಂಬಂಧಿಸಿ ದಂತೆ ಎಲ್ಲಾ ಉಪಕರಣಗಳನ್ನು ಒಳಗೊಂಡಂತೆ ಸರ್ಕಾರಿ ಸ್ವಾಮ್ಯದ ವಿಮಾ ಕಂಪೆನಿಗಳಿಂದ ವಿಮೆ ಪಾಲಿಸಿಯನ್ನು ಪಡೆಯುವುದು ಮತ್ತು ನವೀಕರಿಸುವುದು ಆಯಾ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳ ಜವಾಬ್ದಾರಿಯಾಗಿರುತ್ತದೆ.
- 6.20 ಗುತ್ತಿಗೆದಾರರಿಂದ Work Completion Certificate ಸ್ವೀಕೃತಗೊಂಡ 7 ದಿನಗಳೊಳಗಾಗಿ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಯು Grid interactive hybrid solar Rooftop power plant ಘಟಕವನ್ನು ಗುತ್ತಿಗೆದಾರರಿಂದ ಹಸ್ತಾಂತರಿಸಿಕೊಳ್ಳತಕ್ಕದ್ದು.
- 6.21 ನಿಗದಿತ ಸ್ಥಳದಿಂದ ಸೋಲಾರ್ ಸ್ಥಾವರವನ್ನು ಕಾರಣಾಂತರಗಳಿಂದ ಸ್ಥಳಾಂತರಿಸಲು ಉದ್ದೇಶಿಸಿದಲ್ಲಿ ಅನುಮೋದಿತ ಗುತ್ತಿಗೆದಾರರಿಂದ ತಾಂತ್ರಿಕ ಸಲಹೆ ಪಡೆದು ಸ್ಥಳಾಂತರಿಸುವುದು ಅನುಷ್ಠಾನಾಧಿಕಾರಿ ಜವಾಬ್ದಾರಿಯಾಗಿರುತ್ತದೆ.
- 6.22 ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು ಕೈಗೊಳ್ಳುವ ತೀರ್ಮಾನಗಳು ಅನುಮೋದಿತ ಗುತ್ತಿಗೆದಾರರಿಗೆ ಸಮಂಜಸವೆಂದು ಕಂಡುಬರದಿದ್ದಲ್ಲಿ Notification ಹೊರಡಿಸಿದ ಮೂವತ್ತು ದಿನಗಳೊಳಗಾಗಿ Arbitration tribunal (bangalore jurisdiction only) ಗೆ ಅರ್ಜಿ ಸಲ್ಲಿಸುವುದು.
- 6.23 ಗುತ್ತಿಗೆದಾರರು ಕಾರ್ಯಾದೇಶ ನೀಡಿದ ನಿಗದಿತ ಅವಧಿಯೊಳಗೆ ಕಾಮಗಾರಿಯನ್ನು ಪೂರ್ಣಗೊಳಿಸದಿದ್ದಲ್ಲಿ ಟೆಂಡರ್ ಷರತ್ತುಗಳನ್ವಯ ಕ್ರಮವಹಿಸಲು ಸರ್ಕಾರಕ್ಕೆ ವರದಿ ಸಲ್ಲಿಸುವುದು.
- 6.24 ಕಚೇರಿ ಮೇಲ್ವಿಚಾರಣೆಯ ಮೇಲೆ ಅಳವಡಿಸಲಾದ ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಸ್ಥಾವರದಲ್ಲಿ ಕಾಮಗಾರಿ ಪೂರ್ಣಗೊಂಡ ನಂತರದ 5 ವರ್ಷಗಳ ಅವಧಿಯಲ್ಲಿ (Warranty period) ಏನಾದರೂ ತಾಂತ್ರಿಕ ದೋಷಗಳು, ದುರಸ್ತಿ, Replacement of units parts and accessories ಗಳಿಗೆ ತಗಲುವ ವೆಚ್ಚವನ್ನು ಟೆಂಡರ್ ಷರತ್ತುಗಳನ್ವಯ ಅನುಮೋದಿತ ಗುತ್ತಿಗೆದಾರರೇ ಭರಿಸತಕ್ಕದ್ದು.
- 6.25 Grid interactive hybrid solar rooftop power plant ಗಳ ಅಳವಡಿಕೆ ಕಾಮಗಾರಿಯಲ್ಲಿ ಹೆಚ್ಚುವರಿ, ಕಡಿಮೆಗೊಳಿಸುವ, ಕೈಬಿಡಬಹುದಾದ ಉಪಕರಣಗಳ BOQ ನಲ್ಲಿ ಮಾರ್ಪಾಡು ಮಾಡುವ ಅಧಿಕಾರವನ್ನು ಹಾಗೂ ಸಂದರ್ಭಕ್ಕೆ ಅನುಗುಣವಾಗಿ ನಿಗದಿತ ವಿಧಾನ (Method) ಮತ್ತು ನಿರ್ಮಾಣದ ಅವಧಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಕಾಮಗಾರಿಯನ್ನು ಬದಲಾವಣೆ ಮಾಡುವ ಅಧಿಕಾರವನ್ನು ಅನುಷ್ಠಾನಾಧಿಕಾರಿ ಹೊಂದಿರುತ್ತಾರೆ.

7. ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು:

- 7.1 Grid Interactive Hybrid Solar Rooftop Power Plant ಅಳವಡಿಸುವ ಯೋಜನೆಯಲ್ಲಿ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳ ವಿವರ ಈ ಕೆಳಕಂಡಂತಿದೆ.

ಕ್ರ. ಸಂ	ಸರ್ಕಾರಿ ಇಲಾಖೆ ಹೆಸರು	ಅನುಷ್ಠಾನಾಧಿಕಾರಿಯ ಪದನಾಮ
1	ಗ್ರಾಮ ಪಂಚಾಯತಿ	ಪಂಚಾಯತಿ ಅಭಿವೃದ್ಧಿ ಅಧಿಕಾರಿ
2	ತಾಲ್ಲೂಕು ಪಂಚಾಯತಿ	ಕಾರ್ಯನಿರ್ವಹಣಾಧಿಕಾರಿ
3	ಜಿಲ್ಲಾ ಪಂಚಾಯತಿ	ಮುಖ್ಯ ಕಾರ್ಯನಿರ್ವಹಣಾಧಿಕಾರಿ
4	ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ ಅಧೀನ ಇಲಾಖೆಗಳು	ಜಿಲ್ಲಾ ಪಂಚಾಯತಿ ವ್ಯಾಪ್ತಿಗೆ ಒಳಪಡುವ ಜಿಲ್ಲಾ / ತಾಲ್ಲೂಕು ಮಟ್ಟದ ಕಛೇರಿಗಳ ಮುಖ್ಯಸ್ಥರು

8. ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳ ಕರ್ತವ್ಯಗಳು ಮತ್ತು ಜವಾಬ್ದಾರಿಗಳು:

8.1 ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ ಮುಖ್ಯ ಕಾರ್ಯನಿರ್ವಾಹಣಾಧಿಕಾರಿಗಳು:

- 8.1.1 ಜಿಲ್ಲಾ ಮಟ್ಟದಲ್ಲಿ ಪಂಚಾಯತ್ ರಾಜ್ ಸಂಸ್ಥೆಗಳು ಮತ್ತು ಜಿಲ್ಲಾ ಪಂಚಾಯತಿ ಅಧೀನ ಇಲಾಖೆಗಳ ಕಛೇರಿಗಳಿಗೆ ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಘಟಕ ಅಳವಡಿಸುವ ಕುರಿತು ಸಂಪೂರ್ಣ ಮೇಲುಸ್ತುವಾರಿ ನಿರ್ವಹಿಸುವುದು.
- 8.1.2 ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಘಟಕ ಅಳವಡಿಸಲು ಅಗತ್ಯವಿರುವ ಅನುದಾನದ ಕ್ರೋಢೀಕರಣದ ಮೂಲಕ ಒದಗಿಸಿಕೊಂಡು ಕ್ರಿಯಾ ಯೋಜನೆಯಲ್ಲಿ ಅಳವಡಿಸಲು ಕ್ರಮ ವಹಿಸುವುದು.
- 8.1.3 ಪಂಚಾಯತ್ ರಾಜ್ ಸಂಸ್ಥೆಗಳು/ಅಧೀನ ಇಲಾಖೆಗಳ ಕಛೇರಿಗಳಿಗೆ ಹೈಬ್ರಿಡ್ ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಘಟಕ ಹಾಗೂ Net Meter ಅಳವಡಿಸಲು ಮತ್ತು Grid ನೊಂದಿಗೆ Synchronize ಮಾಡಿಸಲು, ಅವಶ್ಯಕತೆಗೆ ಅನುಗುಣವಾಗಿ ಹೆಚ್ಚುವರಿಯಾಗಿ ವಿದ್ಯುತ್ ಸಾಮರ್ಥ್ಯವನ್ನು ಮೇಲ್ದರ್ಜೆಗರಿಸಲು ಎಸ್ಕಾಂ-ನೊಂದಿಗೆ ಸಮನ್ವಯ ಸಾಧಿಸಿ ಕ್ರಮ ವಹಿಸುವುದು.
- 8.1.4 ಕಾರ್ಯಕ್ರಮ ಅನುಷ್ಠಾನದ ಪ್ರಗತಿ ಕುರಿತು ಪ್ರತಿ 15 ದಿನಗಳಿಗೊಮ್ಮೆ ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ ಅಧೀನ ಇಲಾಖೆಗಳ [ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು, ಜಿಲ್ಲಾ ನೋಡಲ್ ಅಧಿಕಾರಿ, ESCOM ಅಧಿಕಾರಿ, ತಾಲ್ಲೂಕು ನೋಡಲ್ ಅಧಿಕಾರಿಗಳೊಂದಿಗೆ ಪ್ರಗತಿ ಪರಿಶೀಲನಾ ಸಭೆ ಜರುಗಿಸುವುದು ಹಾಗೂ ನಿಗದಿತ ನಮೂನೆಗಳಲ್ಲಿ ಪ್ರತಿ ತಿಂಗಳು ಪ್ರಗತಿ ವರದಿಯನ್ನು ಸರ್ಕಾರಕ್ಕೆ ಸಲ್ಲಿಸುವುದು.

8.2 ಜಿಲ್ಲಾ ಪಂಚಾಯತ ಉಪಕಾರ್ಯದರ್ಶಿಗಳು:

- 8.2.1 ಕಾರ್ಯಕ್ರಮದ ಸಮರ್ಪಕ ಅನುಷ್ಠಾನಕ್ಕಾಗಿ ನಿಗದಿಪಡಿಸಿದ ಗುತ್ತಿಗೆದಾರರಿಂದ ಜಿಲ್ಲಾ ಸೇವಾ ಕೇಂದ್ರದ ವಿವರಗಳನ್ನು ಪಡೆದು ಎಲ್ಲಾ ಅಧೀನ ಇಲಾಖೆಗಳಿಗೆ/ಪಂಚಾಯತ್ ರಾಜ್ ಸಂಸ್ಥೆಗಳಿಗೆ ಮಾಹಿತಿ ನೀಡುವುದು.
- 8.2.2 ಗುತ್ತಿಗೆದಾರರು ಮತ್ತು ತಾಲ್ಲೂಕು ನೋಡಲ್ ಅಧಿಕಾರಿಗಳೊಂದಿಗೆ ಕಾಲಕಾಲಕ್ಕೆ ಸಭೆಯನ್ನು ಜರುಗಿಸಿ ಪ್ರಗತಿ ಪರಿಶೀಲನೆ ನಡೆಸಿ ಪ್ರಗತಿಯ ವರದಿಯನ್ನು ಕಾಲಕಾಲಕ್ಕೆ ನಿಗದಿತ ನಮೂನೆಯಲ್ಲಿ ಸರ್ಕಾರಕ್ಕೆ ಸಲ್ಲಿಸುವುದು.
- 8.2.3 ಜಿ. ಪಂ/ತಾ. ಪಂ/ಗ್ರಾ. ಪಂಗಳು ಮತ್ತು ಜಿ. ಪಂ ಅಧೀನ ಇಲಾಖೆಗಳೊಂದಿಗೆ ಸಮಾಲೋಚಿಸಿ, ಮೇಲ್ವಿಚಾರಣೆ ವಿಸ್ತೀರ್ಣ, ಅನುದಾನ ಲಭ್ಯತೆ ಮತ್ತು ಅವಶ್ಯಕತೆಗನುಗುಣವಾಗಿ ಸೋಲಾರ್ ಘಟಕ ಅಳವಡಿಸಲು ಬೇಕಾಗಿರುವ Kw ಸಾಮರ್ಥ್ಯದ ವಿವರವನ್ನು ಸಂಗ್ರಹಿಸಿ, ಕಾರ್ಯಕ್ರಮವನ್ನು ಯಶಸ್ವಿಯಾಗಿ ಪೂರ್ಣ ಗೊಳಿಸಲು ಅಗತ್ಯ ಕ್ರಮ ವಹಿಸುವುದು.
- 8.2.4 15ನೇ ಹಣಕಾಸು ಯೋಜನೆಯಡಿ ಪ್ರಸ್ತುತ ಸಾಲಿನಲ್ಲಿ ಈಗಾಗಲೇ ಕ್ರಿಯಾ ಯೋಜನೆ ಅನುಮೋದನೆಯಾಗಿದ್ದಲ್ಲಿ, ಪ್ರಾರಂಭಿಸದ / ತುರ್ತು ಅಗತ್ಯತೆ ಇಲ್ಲದ ಕಾಮಗಾರಿಯನ್ನು ಕೈಬಿಟ್ಟು Grid

interactive Hybrid Solar Rooftop Power plants ಅಳವಡಿಸುವ ಕಾಮಗಾರಿಯನ್ನು ಕ್ರಿಯಾಯೋಜನೆಯಲ್ಲಿ ಅಳವಡಿಸಲು ಕ್ರಮ ವಹಿಸುವುದು.

- 8.2.5 ಆಯಾ ಪಂಚಾಯತ್ ರಾಜ್ ಸಂಸ್ಥೆ / ಅಧೀನ ಇಲಾಖೆಗಳಿಂದ ಪಡೆದ ಅನುಮೋದಿತ ಕಾರ್ಯದೇಶದ ದೃಢೀಕೃತ ಪ್ರತಿಯನ್ನು ಸಂಗ್ರಹಿಸಿ, ಕ್ರೋಢೀಕೃತ ಮಾಹಿತಿಗಳನ್ನು ನಿಗದಿತ ನಮೂನೆಗಳಲ್ಲಿ ಕಾಲಕಾಲಕ್ಕೆ ಸರ್ಕಾರಕ್ಕೆ ಸಲ್ಲಿಸುವುದು.
- 8.2.6 ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ ಹಾಗೂ ಜಿಲ್ಲಾ ಪಂಚಾಯತ್ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಬರುವ ಇಲಾಖೆಗಳಲ್ಲಿ ಅಳವಡಿಸಿದ ಒಟ್ಟು ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳ ಪೈಕಿ ಕನಿಷ್ಠ ಶೇ.5ರಷ್ಟು ಸ್ಥಾವರಗಳ ಪರಿವೀಕ್ಷಣೆ ಮತ್ತು ಪರಿಶೀಲನೆಯನ್ನು ಸಮಗ್ರ ಗ್ರಾಮೀಣ ಇಂಧನ ಕಾರ್ಯಕ್ರಮದ ಯೋಜನಾ ಅಭಿಯಂತರರೊಂದಿಗೆ ಕೈಗೊಂಡು ಕಾರ್ಯಕ್ಷಮತೆ ಕುರಿತಂತೆ ಸರ್ಕಾರಕ್ಕೆ ವರದಿ ಮಾಡುವುದು.
- 8.2.7 ಸೋಲಾರ್ ಘಟಕಗಳ ನಿರ್ಮಾಣ, ಕಾರ್ಯಕ್ಷಮತೆ ಕುರಿತಂತೆ 3rd party inspection ಗಾಗಿ ಸರ್ಕಾರದಿಂದ ನಿಯೋಜಿಸಲ್ಪಟ್ಟ ತಾಂತ್ರಿಕ ಪರಿಣಿತರು ನಿಗದಿತ ಸಮಯದಲ್ಲಿ ಘಟಕಗಳ ತಾಂತ್ರಿಕ ಪರಿಶೀಲನೆ ಕೈಗೊಂಡಿರುವ ಕುರಿತಂತೆ ಉಸ್ತುವಾರಿ ಕೈಗೊಳ್ಳುವುದು.

8.3 ತಾಲ್ಲೂಕು ಪಂಚಾಯತ್ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಧಿಕಾರಿಗಳು:

- 8.3.1. ಕಾರ್ಯಕ್ರಮ ಅನುಷ್ಠಾನಕ್ಕಾಗಿ ತಾಲ್ಲೂಕು ಮಟ್ಟದಲ್ಲಿ ತಾಲ್ಲೂಕು ನೋಡಲ್ ಅಧಿಕಾರಿಗಳಾಗಿದ್ದು, ತಾಲ್ಲೂಕು ಮಟ್ಟದ ಸಮನ್ವಯ ಅಧಿಕಾರಿಯಾಗಿ ಕಾರ್ಯನಿರ್ವಹಿಸಿ, ತಾ.ಪಂ. / ಅಧೀನ ಇಲಾಖೆಗಳು ಹಾಗೂ ಗ್ರಾಮ ಪಂಚಾಯತ್ ಗಳೊಂದಿಗೆ ಸಮನ್ವಯ ಸಾಧಿಸಿ, ಕಾರ್ಯಕ್ರಮ ಯಶಸ್ವಿಗೊಳಿಸುವುದು.
- 8.3.2. ಗುತ್ತಿಗೆದಾರರೊಂದಿಗೆ ಮತ್ತು ತಾಲ್ಲೂಕು ಪಂಚಾಯತ್, ಗ್ರಾಮ ಪಂಚಾಯತಿ ಮತ್ತು ಇನ್ನಿತರ ಅಧೀನ ಇಲಾಖೆ ಗಳೊಂದಿಗೆ ಸಮಾಲೋಚಿಸಿ ಮೇಲ್ವಿಚಾರಣೆ ವಿಸ್ತೀರ್ಣ, ಅನುದಾನ ಲಭ್ಯತೆ ಮತ್ತು ಸೋಲಾರ್ ಘಟಕ ಅಳವಡಿಸಲು ಬೇಕಾಗಿರುವ Kw ಸಾಮರ್ಥ್ಯದ ವಿವರವನ್ನು ಕಾಲಕಾಲಕ್ಕೆ ಪರಿಶೀಲನಾ ಸಭೆ ಜರುಗಿಸಿ, ಕ್ರೋಢೀಕೃತ ವರದಿಗಳನ್ನು ಜಿಲ್ಲಾ ನೋಡಲ್ ಅಧಿಕಾರಿಗಳಿಗೆ ಸಲ್ಲಿಸುವುದು.
- 8.3.3. 15 ನೇ ಹಣಕಾಸು ಯೋಜನೆ, ಅಭಿವೃದ್ಧಿ ಅನುದಾನ, ಮುದ್ರಾಂಕ ಅಧಿಭಾರ ಶುಲ್ಕ, ಗ್ರಾಮ ಪಂಚಾಯತಿ ವರ್ಗ-1 ಹಾಗೂ ಇನ್ನಿತರೆ ಲಭ್ಯವಿರುವ ಅನುದಾನದಲ್ಲಿ ಈ ಯೋಜನೆಗೆ ಅನುದಾನ ಕಾಯ್ದಿರಿಸಿ ಕ್ರಿಯಾ ಯೋಜನೆಯಲ್ಲಿ ಅಳವಡಿಸಿಕೊಂಡಿರುವ ಬಗ್ಗೆ ಖಾತ್ರಿ ಪಡಿಸಿಕೊಳ್ಳುವುದು
- 8.3.4. ತಾಲ್ಲೂಕು ಪಂಚಾಯತಿ ಮತ್ತು ಗ್ರಾಮ ಪಂಚಾಯತಿ ಕಛೇರಿಗಳ ದೃಢೀಕೃತ ಸೈಟ್ ಸರ್ವೆ ವರದಿಗಳನ್ನು ನಿಗದಿತ ನಮೂನೆಯಲ್ಲಿ ಅನುಮೋದಿತ ಸಂಸ್ಥೆಗಳಿಂದ ಪಡೆದು ಕ್ರೋಢೀಕರಿಸಿ ಜಿಲ್ಲಾ ನೋಡಲ್ ಅಧಿಕಾರಿಗಳಿಗೆ ಸಲ್ಲಿಸುವುದು.
- 8.3.5. ತಾಲ್ಲೂಕಿನಲ್ಲಿ ಅನುಷ್ಠಾನಗೊಂಡ ಒಟ್ಟು ಸೋಲಾರ್ ಘಟಕಗಳ ಪೈಕಿ ಕನಿಷ್ಠ 10% ರಷ್ಟು ಸ್ಥಾವರಗಳಿಗೆ ಭೇಟಿ ನೀಡಿ ಪರಿಶೀಲಿಸಿ, ಕಾರ್ಯಕ್ಷಮತೆಯ ಬಗ್ಗೆ ಖಚಿತಪಡಿಸಿಕೊಂಡು ಜಿಲ್ಲಾ ನೋಡಲ್ ಅಧಿಕಾರಿಗಳಿಗೆ ವರದಿ ಸಲ್ಲಿಸುವುದು.
- 8.3.6. ತಾಲ್ಲೂಕು ಮಟ್ಟದ ಅನುಷ್ಠಾನ ಅಧಿಕಾರಿಗಳು, ಹಾಗೂ ಗ್ರಾಮ ಪಂಚಾಯತಿ ಅಭಿವೃದ್ಧಿ ಅಧಿಕಾರಿಗಳಿಂದ ಕಾರ್ಯಕ್ರಮ ಅನುಷ್ಠಾನಕ್ಕಾಗಿ ನಿಗದಿತ ಕಾಲಾವಧಿಯಲ್ಲಿ ಕಾರ್ಯದೇಶ & ಕರಾರು ಒಪ್ಪಂದ ಮತ್ತು ಟೆಂಡರ್ ನಿಬಂಧನೆಗಳನ್ವಯ ಬಿಲ್ ಸಲ್ಲಿಸಿದ 30 ದಿನಗಳೊಳಗಾಗಿ ಪಾವತಿಸಲು ಅಗತ್ಯ ಮೇಲ್ವಿಚಾರಣೆ ಮಾಡುವುದು.

8.3.7. ಕಾರ್ಯಕ್ರಮ ಅನುಷ್ಠಾನದ ಪ್ರಗತಿ ಪರಿಶೀಲನಾ ಸಭೆಯನ್ನು ನಿಗದಿತ ಗುತ್ತಿಗೆದಾರರೊಂದಿಗೆ ಮತ್ತು ತಾ.ಪಂ. / ಗ್ರಾ.ಪಂ. ಗಳು ಮತ್ತು ಇನ್ನಿತರ ತಾ.ಪಂ. ಅಧೀನ ಇಲಾಖೆಗಳೊಂದಿಗೆ ಪ್ರತಿ 15 ದಿನಗಳಿಗೊಮ್ಮೆ ಜರುಗಿಸಿ ಕಾರ್ಯಕ್ರಮವನ್ನು ಯಶಸ್ವಿಯಾಗಿ ಪೂರ್ಣಗೊಳಿಸಲು ಅಗತ್ಯ ಕ್ರಮ ವಹಿಸುವುದು. ಮತ್ತು ಕಾಲಕಾಲಕ್ಕೆ ಪ್ರಗತಿ ವರದಿಯನ್ನು ಜಿಲ್ಲಾ ನೋಡಲ್ ಅಧಿಕಾರಿಗಳಿಗೆ ಸಲ್ಲಿಸುವುದು.

8.4 ಪಂಚಾಯತಿ ಅಭಿವೃದ್ಧಿ ಅಧಿಕಾರಿಗಳು:

8.4.1. ಗುತ್ತಿಗೆದಾರರಿಂದ ಕಚೇರಿಯ ಮೇಲ್ವಿಚಾರಣೆ ಸ್ಥಳ ಪರಿಶೀಲನೆ (Site Survey) ಕೈಗೊಂಡು ನೀಡಿದ ಸಮಗ್ರ ಯೋಜನಾ ವರದಿಯಂತೆ ನಿಗದಿತ ಸಾಮರ್ಥ್ಯದ Grid Interactive Hybrid Rooftop Solar Power Plant ಅಳವಡಿಕೆ ಮಾಡತಕ್ಕದ್ದು. ಕಾರ್ಯಕ್ರಮ ಅನುಷ್ಠಾನವನ್ನು ಅನುದಾನದ ಕ್ರೋಢೀಕರಣದೊಂದಿಗೆ ಅಗತ್ಯ ಕ್ರಿಯಾ ಯೋಜನೆಯನ್ನು ತಯಾರಿಸಿ, ಗುತ್ತಿಗೆದಾರರಿಗೆ ಕಾರ್ಯಾದೇಶವನ್ನು ನೀಡತಕ್ಕದ್ದು. ಸ್ಥಳ ಪರಿಶೀಲನೆ, ಕಾರ್ಯಾದೇಶ, ಎಸ್ಕಾಂನೊಂದಿಗೆ ನೆಟ್-ಮೀಟರಿಂಗ್ ಹಾಗೂ ವಿದ್ಯುತ್ ಖರೀದಿ ಒಪ್ಪಂದಕ್ಕಾಗಿ ನಿಗದಿತ ಅರ್ಜಿಯನ್ನು ಸಲ್ಲಿಸಿದ ಬಗ್ಗೆ ವರದಿಯನ್ನು ತಾ. ಪಂ / ಜಿ. ಪಂ ಗೆ ಸಲ್ಲಿಸತಕ್ಕದ್ದು.

8.4.2. ಕಾರ್ಯಾದೇಶದನ್ವಯ ಘಟಕ ಸಾಮಗ್ರಿಗಳು ನಿಗದಿತ ಗುಣಮಟ್ಟ ಹೊಂದಿದ ಬಗ್ಗೆ Pre-Dispatch Inspection Committee ಇವರಿಂದ ಪಡೆದ ಧೃಡೀಕರಣ ಪ್ರಮಾಣ ಪತ್ರವನ್ನು ಲಗತ್ತಿಸಿ, ಗುತ್ತಿಗೆದಾರರು ಗ್ರಾಮ ಪಂಚಾಯತ್ ಗಳಿಗೆ ಘಟಕ ಸಾಮಗ್ರಿಗಳನ್ನು ಸರಬರಾಜು ಮಾಡತಕ್ಕದ್ದು.

8.4.3. ಗ್ರಾಮ ಪಂಚಾಯತಗಳಿಗೆ ಸರಬರಾಜು ಮಾಡಿದ ಸಾಮಗ್ರಿಗಳನ್ನು ಜಿ.ಪಂ. ನ ಗ್ರಾಮೀಣ ಇಂಧನ ಕಾರ್ಯಕ್ರಮದ ಯೋಜನಾ ಅಭಿಯಂತರರಿಂದ ನಿಗದಿತ ನಮೂನೆ (ಅನುಬಂಧ-5) ಯಲ್ಲಿನ Bill of Quantities ಅನುಸಾರ ಟೆಂಡರ್‌ನಲ್ಲಿ ನಿಗದಿತ ತಾಂತ್ರಿಕ ವಿನ್ಯಾಸ ಮತ್ತು ಸಾಮಗ್ರಿಗಳ ಸಂಖ್ಯೆಯನ್ನು ಸ್ಥಾನಿಕ ಪರಿಶೀಲನೆ ಕೈಗೊಂಡು, ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು, ಮತ್ತು ಯೋಜನಾ ಅಭಿಯಂತರರ ಜಂಟಿ ಧೃಡೀಕರಣದೊಂದಿಗೆ ವರದಿಯನ್ನು ನೀಡುವುದು. ಸದರಿ ವರದಿಯನ್ವಯ ಕಾರ್ಯಾದೇಶ ಮೊತ್ತದ ಶೇ.80ನ್ನು ಮೊದಲ ಕಂತಿನ ಬಿಲ್ಲು ಗ್ರಾಮಪಂಚಾಯತ ನಿಂದ ನಿಯಮಾನುಸಾರ ಗುತ್ತಿಗೆದಾರರಿಗೆ ಪಾವತಿಸುವುದು. ಮತ್ತು ಅಂತಿಮ ಬಿಲ್ಲು ಮೊತ್ತವನ್ನು ಗುತ್ತಿಗೆದಾರರಿಗೆ ಪಾವತಿಸುವ ಸಲುವಾಗಿ ಜಿ.ಪಂ. ನಿಂದ ಹಣ ಸಂದಾಯಕ್ಕಾಗಿ ಆದೇಶವನ್ನು ಪಡೆದ ನಂತರ ಪಾವತಿಸತಕ್ಕದ್ದು.

8.4.4. **Grid Interactive Hybrid Solar Rooftop Power Plant** ಕಾರ್ಯಕ್ರಮ ಅನುಷ್ಠಾನ ಪೂರ್ಣಗೊಂಡ ನಂತರ ಗುತ್ತಿಗೆದಾರರು 5 ವರ್ಷಗಳವರೆಗೆ ನಿರಂತರ ಸ್ಥಾವರ ನಿರ್ವಹಣೆಯನ್ನು ಕಾಲಕಾಲಕ್ಕೆ ಒದಗಿಸಬೇಕಾಗಿದ್ದು, ಸ್ಥಾವರಗಳ ನಿರ್ವಹಣೆಯಲ್ಲಿ ಏನಾದರೂ ಸಮಸ್ಯೆ ಉಂಟಾದಲ್ಲಿ ಕೂಡಲೇ ಗುತ್ತಿಗೆದಾರರ ಸೇವಾ ಕೇಂದ್ರಕ್ಕೆ ಮಾಹಿತಿ ನೀಡತಕ್ಕದ್ದು. ಹಾಗೂ ಲಾಗ್ ಫುಸ್ಟರ್‌ನಲ್ಲಿ ಸೋಲಾರ್ ಸ್ಥಾವರದಿಂದ ವಿದ್ಯುತ್ ಉತ್ಪಾದನೆಯ ವಿವರಗಳನ್ನು ರಿಜಿಸ್ಟ್ರರನಲ್ಲಿ ನಮೂದಿಸುವುದು ಹಾಗೂ ಸದರಿ ಮಾಹಿತಿಗಳನ್ನು ತಾ.ಪಂ. ಮತ್ತು ಜಿಲ್ಲಾ ಪಂಚಾಯತಿಗಳಿಗೆ ಮಾಸಿಕ ವರದಿ ಸಲ್ಲಿಸತಕ್ಕದ್ದು.

9 ಅನುಮೋದಿತ ಗುತ್ತಿಗೆದಾರರ ಹೊಣೆ;

9.1. ಟೆಂಡರ್ ಷರತ್ತುಗಳನ್ವಯ ಅನುಮೋದಿತ ಗುತ್ತಿಗೆದಾರರು ಜಿಲ್ಲಾ ಮಟ್ಟದಲ್ಲಿ ಸೇವಾ ಕೇಂದ್ರಗಳನ್ನು ತೆರೆದು 5 ವರ್ಷಗಳ ಅವಧಿಯಲ್ಲಿ Warranty ಮತ್ತು 6 ರಿಂದ 10 ನೇ ವರ್ಷದ ಅವಧಿಗೆ CMC ನ್ನು ಸಮರ್ಪಕವಾಗಿ ಸಕಾಲದಲ್ಲಿ ನಿರ್ವಹಿಸತಕ್ಕದ್ದು.

- 9.2. ಅನುಮೋದಿತ ಗುತ್ತಿಗೆದಾರರು ಜಿಲ್ಲಾ ಮಟ್ಟದಲ್ಲಿ ತೆರೆಯುವ ಸೇವಾ ಕೇಂದ್ರಗಳಲ್ಲಿ ನಿರ್ವಹಣೆಗೆ ಸಂಬಂಧಿಸಿದ ದೂರುಗಳನ್ನು (Help desk) ಸ್ವೀಕರಿಸಿದ ಕನಿಷ್ಠ 3 ದಿನದೊಳಗಾಗಿ ನಿರ್ವಹಣೆ ಮಾಡತಕ್ಕದ್ದು.
- 9.3. ಅನುಮೋದಿತ ಗುತ್ತಿಗೆದಾರರು ನಿರ್ವಹಣೆ ಕುರಿತು 3 ತಿಂಗಳಿಗೊಮ್ಮೆ ಸೋಲಾರ್ ಅಳವಡಿಸಿದ ಕಛೇರಿಗಳಿಗೆ Periodical inspection ಮಾಡಿ Logbook ನ್ನು ನಿರ್ವಹಿಸಿ ಇದರಲ್ಲಿ ವಿದ್ಯುಚ್ಛಕ್ತಿ ಉತ್ಪಾದನೆ ಮತ್ತು ವಿನಿಯೋಗದ ಕುರಿತು Netmetering ನ Reading ನ್ನು ದಾಖಲಿಸುವುದು ಮತ್ತು ಪಾನ್ಯಲ್‌ಗಳ ಸ್ವಚ್ಛತೆ, ಬ್ಯಾಟರಿಗಳಿಗೆ Distilled ವಾಟರ್, inverter ಸಮರ್ಪಕವಾಗಿ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿರುವ ಬಗ್ಗೆ ಗುತ್ತಿಗೆದಾರರ ಪ್ರತಿನಿಧಿ ಮತ್ತು ಪಂಚಾಯತಿ PDO / ಕಾರ್ಯದರ್ಶಿ ಕಛೇರಿ Log Book ನಲ್ಲಿ ಸಹಿ ಮಾಡುವುದು.
- 9.4. ಅನುಮೋದಿತ ಗುತ್ತಿಗೆದಾರರು ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳನ್ನು ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು ಸೂಚಿಸುವ ಕಛೇರಿ ಕಟ್ಟಡದ ಮೇಲ್ಭವಣಿ ಮೇಲೆ ಅಳವಡಿಸುವುದು ಮತ್ತು Inverter ಅಳವಡಿಸಿರುವ ಸ್ಥಳದಲ್ಲಿ ಗುತ್ತಿಗೆದಾರರ ಹೆಸರು, ವಿಳಾಸ, Mobile ಸಂಖ್ಯೆ, ಸೇವಾ ಕೇಂದ್ರಗಳ ಮಾಹಿತಿಯನ್ನು ಒಳಗೊಂಡಂತೆ ನಾಮಫಲಕ ಅಳವಡಿಸತಕ್ಕದ್ದು.
- 9.5. ಅನುಮೋದಿತ ಸಂಸ್ಥೆಗಳು 5 ವರ್ಷಗಳ Warranty ಅವಧಿ ಪೂರ್ಣಗೊಂಡ ದಿನಾಂಕದಿಂದ ಪುನಃ 5 ವರ್ಷಗಳ ಅವಧಿಗೆ Comprehensive Maintenance Contract ನ್ನು ಹೊಂದುವುದು.
- 9.6. ಐದು ವರ್ಷಗಳ ವ್ಯಾರಂಟಿ ಅವಧಿ ಪೂರ್ಣಗೊಂಡ ನಂತರ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಯು LOI ಪತ್ರ ನೀಡಿದ 21 ದಿನಗಳೊಳಗಾಗಿ Comprehensive Maintenance Contract (CMC) ನ್ನು ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು ಅನುಮೋದಿತ ಗುತ್ತಿಗೆದಾರರೊಂದಿಗೆ CMC ಕರಾರು ಒಪ್ಪಂದವನ್ನು ಅನುಷ್ಠಾನಾಧಿಕಾರಿಯೊಂದಿಗೆ ಮಾಡಿಕೊಳ್ಳುವುದು.
- 9.7. ಸೋಲಾರ್ ವಿದ್ಯುತ್ ಸ್ಥಾವರಗಳ ಉಪಕರಣಗಳನ್ನು ಅಳವಡಿಸಿ ಮೇಲ್ಭವಣಿ ಜಾಗದ ಸಮಸ್ಯೆ ಉದ್ಭವವಾದಲ್ಲಿ ಪರ್ಯಾಯ ಸರ್ಕಾರಿ ಕಟ್ಟಡದ ಮೇಲೆ ಅಳವಡಿಸಲು ತಾಲ್ಲೂಕು ಪಂಚಾಯತಿ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಧಿಕಾರಿಗಳ ಗಮನಕ್ಕೆ ತಂದು ಸಮಸ್ಯೆ ಬಗ್ಗೆಹರಿಸಿಕೊಳ್ಳತಕ್ಕದ್ದು.
- 9.8. ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು ನೀಡುವ ಲಿಖಿತ ಸೂಚನೆಗಳನ್ವಯ ಅನುಮೋದಿತ ಗುತ್ತಿಗೆದಾರರು ತಾಂತ್ರಿಕವಾಗಿ ಪರಿಶೀಲಿಸಿ ಬದಲಾವಣೆಗಳನ್ನು ಮಾಡುವುದು.
- 9.9. ಕಾರ್ಯಾಧೇಶದಲ್ಲಿ ವಿಧಿಸಿರುವ ಷರತ್ತುಗಳು ಮತ್ತು ಒಪ್ಪಂದ ಕರಾರುಗಳನ್ನು ಉಭಯತರರು ಪಾಲಿಸತಕ್ಕದ್ದು.
- 9.10. ಸರ್ಕಾರ ನಿಗದಿಪಡಿಸಿರುವ Package ವಾರು L1 ದರಗಳು ಮತ್ತು ತಾಂತ್ರಿಕ ವಿನ್ಯಾಸಗಳನ್ವಯ ಅನುಷ್ಠಾನಗೊಳಿಸುವುದು. ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳ ಯಾವುದೇ ಆದೇಶವಿಲ್ಲದೇ ಸಾಮರ್ಥ್ಯ (KW), ಉಪಕರಣಗಳ ಬದಲಾವಣೆ ಮತ್ತು ಹೆಚ್ಚಳ / ಕಡಿಮೆ ಮಾಡತಕ್ಕದ್ದಲ್ಲ.

10. ಕಾಮಗಾರಿಗಳಿಗೆ ಅನುದಾನ ಬಿಡುಗಡೆ

- 10.1 ಗುತ್ತಿಗೆದಾರರು ಕಾಮಗಾರಿ ಅನುಷ್ಠಾನಕ್ಕಾಗಿ ಘಟಕದ ಸಂಪೂರ್ಣ ಸಾಮಗ್ರಿಗಳನ್ನು ಸರಬರಾಜು ಮಾಡಿದ ನಂತರ ಕಾಮಗಾರಿ ಆದೇಶ ಮೊತ್ತದ ಶೇ.80ರಷ್ಟು ಹಣ ಸಂದಾಯಕ್ಕಾಗಿ ಬಿಲ್ ನ್ನು ಈ ಕೆಳಕಂಡ ದಾಖಲೆಗಳೊಂದಿಗೆ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳಿಗೆ ಸಲ್ಲಿಸುವುದು.

- 10.2 ಮೊದಲನೇ ಹಂತ - ಕಾಮಗಾರಿಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಮೊದಲ ಹಂತದಲ್ಲಿ ಘಟಕಗಳಿಗೆ ಅನುಮೋದಿತ ಕಾಮಗಾರಿಯ ಒಟ್ಟಾರೆ ಬಿಲ್ ಮೊತ್ತದ ಶೇ.80ರಷ್ಟು ಮೊತ್ತವನ್ನು (CMC ಮೊತ್ತವನ್ನು ಹೊರತುಪಡಿಸಿ) ಈ ಕೆಳಕಂಡ ಅಂಶಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ದಾಖಲೆ ಮತ್ತು ಪ್ರಕ್ರಿಯೆ ಪಾಲನೆಯನ್ನಯ ಪಾವತಿಸತಕ್ಕದ್ದು.
- ಇನ್ ವಾಯ್ಸ್ ತ್ರಿ ಪ್ರತಿಗಳಲ್ಲಿ.
 - ಸಾಮಗ್ರಿ ಪೂರೈಕೆಯ ಡೆಲಿವರಿ ಚಲನ್,
 - ನೆಟ್ ಮೀಟರಿಂಗ್ ಅಳವಡಿಕೆಗಾಗಿ -ಸಂಬಂಧಿಸಿದ ಎಸ್ಕಾಂ. ಗೆ ಸಲ್ಲಿಸಿದ ಅರ್ಜಿ ಪ್ರತಿ.
 - ಜಿಲ್ಲಾ ಪಂಚಾಯತ ಯೋಜನಾ ಅಭಿಯಂತರ-ಸಗ್ರಾಇಂಕಾ, ಇವರಿಂದ ನಿಗದಿತ ನಮೂನೆಯಲ್ಲಿ ಸ್ಥಾನಿಕ ಪರಿಶೀಲನಾ ವರದಿ. (Post Dispatch Inspection)
 - Delivery certificate (DC) ನ್ನು ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು ಅಥವಾ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳಿಂದ ನಿಯೋಜಿಸಲ್ಪಟ್ಟ ಅಧಿಕಾರಿಗಳು ದೃಢೀಕರಿಸತಕ್ಕದ್ದು.
- 10.3 ಎರಡನೇ ಹಂತ - ಕಾಮಗಾರಿಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಎರಡನೇ ಹಂತದಲ್ಲಿ ಅನುಮೋದಿತ ಕಾಮಗಾರಿಯ ಒಟ್ಟಾರೆ ಬಿಲ್ ಮೊತ್ತದಲ್ಲಿ ಬಾಕಿ ಉಳಿದ ಶೇ.20ರಷ್ಟು ಮೊತ್ತವನ್ನು ಈ ಕೆಳಕಂಡ ಅಂಶಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ದಾಖಲೆ ಮತ್ತು ಪ್ರಕ್ರಿಯೆ ಪಾಲನೆಯನ್ನಯ ಪಾವತಿಸತಕ್ಕದ್ದು.
- ಕಾಮಗಾರಿ ಪೂರ್ಣಗೊಂಡಿರುವ ಬಗ್ಗೆ ಗುತ್ತಿಗೆದಾರರಿಂದ Work Completion report
 - ESCOM ನಿಂದ ಪಡೆದ Synchronization certificate.
 - ಸರ್ಕಾರದಿಂದ ನಿಯೋಜಿತಗೊಂಡ 3rd Party Agency ರವರಿಂದ ಪಡೆದ ದೃಢೀಕರಣ.
 - ಒಂದು ವೇಳೆ Commissioning and Synchronization ವಿಳಂಬವಾದಲ್ಲಿ ಅನುಮೋದಿತ ಗುತ್ತಿಗೆದಾರರನ್ನು ಕಾರಣಗೊಳಿಸುವಂತಿಲ್ಲ ಹಾಗೂ ಶೇ.20ರಷ್ಟು ಬಾಕಿ ಬಿಲ್ಲು ಮೊತ್ತವನ್ನು ಪಾವತಿಸುವ ಸಂದರ್ಭದಲ್ಲಿ ಶೇ.5ರಷ್ಟು ಬಿಲ್ ಮೊತ್ತಕ್ಕೆ ಹೆಚ್ಚುವರಿ ಬ್ಯಾಂಕ್ ಗ್ಯಾರಂಟಿಯನ್ನು ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು ಪಡೆಯತಕ್ಕದ್ದು.
- 10.4 ಅನುಮೋದಿತ ಗುತ್ತಿಗೆದಾರರು ನಿಗದಿಪಡಿಸಿದ ದರವು GST ಹಾಗೂ ಇನ್ನಿತರೆ ತೆರಿಗೆಗಳನ್ನು ಒಳಗೊಂಡಿರುತ್ತದೆ. ಈ ಅಂಶವನ್ನು ಪರಿಗಣಿಸಿ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು ನಿಗದಿಪಡಿಸಿದ ದರವನ್ನು ಗುತ್ತಿಗೆ ದಾರರಿಗೆ ಪಾವತಿಸುವಾಗ ನಿಯಮಾನುಸಾರ ಕಟಾಯಿಸಬಹುದಾದ ತೆರಿಗೆಗಳನ್ನು ಕಡಿತಗೊಳಿಸಿ ಪಾವತಿಸತಕ್ಕದ್ದು.
- 10.5 ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು ಅನುಮೋದಿತ ಗುತ್ತಿಗೆದಾರರಿಗೆ ಮುಂಗಡವಾಗಿ ಅನುದಾನವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದಲ್ಲ.
- 10.6 Comprehensive Maintenance Contract (CMC) ಅವಧಿಯು ಒಂದು ವರ್ಷ ಪೂರ್ಣಗೊಂಡ ತರುವಾಯ CMC ಒಟ್ಟು ಮೊತ್ತದ 1/5th ಮೊತ್ತವನ್ನು ಆಯಾ ಸಾಲಿನ ಆರ್ಥಿಕ ವರ್ಷದ ಅಂತ್ಯದಲ್ಲಿ 6 ರಿಂದ 10 ನೇ ವರ್ಷದ ಅವಧಿಗೆ ಈ ಕೆಳಕಂಡ ದಾಖಲೆಗಳನ್ನು ಪಡೆದು ದೃಢೀಕರಣದನ್ನಯ ಪಾವತಿಸುವುದು.
- Invoice in Triplicate;
 - Solar ಘಟಕಗಳ ಸುರಕ್ಷತಾ ನಿರ್ವಹಣೆ ವರದಿಗೆ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು / ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳಿಂದ ನಿಯೋಜಿಸಲ್ಪಟ್ಟ ಸಿಬ್ಬಂದಿಯವರಿಂದ ದೃಢೀಕರಣ ಪಡೆಯುವುದು.
 - ಸದರಿ ಘಟಕವು ತೃಪ್ತಿಕರವಾಗಿ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿರುವ ಬಗ್ಗೆ ಜಿಲ್ಲಾ ಪಂಚಾಯತಿಯ ಗ್ರಾಮೀಣ ಇಂಧನ ಕಾರ್ಯಕ್ರಮದ ಯೋಜನಾ ಅಭಿಯಂತರರಿಂದ ದೃಢೀಕರಣ ಪಡೆಯುವುದು.
 - CMC ಕಾರ್ಯವನ್ನು ಸಮರ್ಪಕವಾಗಿ ಪೂರ್ಣಗೊಳಿಸಿರುವ ಬಗ್ಗೆ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳಿಂದ ದೃಢೀಕರಣ ಪಡೆಯುವುದು.

11.ಸಾಗಾಣಿಕೆ

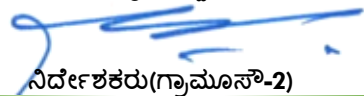
- 11.1 ಅನುಮೋದಿತ ಗುತ್ತಿಗೆ ದಾರರು ತಾತ್ಕಾಲಿಕವಾಗಿ package and Capacity wise ಹಂಚಿಕೆ ಹಾಗೂ ನಿಗದಿತ ವಿನ್ಯಾಸ(specification) ಗಳನ್ವಯ ಸೋಲಾರ್ ಘಟಕಗಳಿಗೆ ಸಂಬಂಧಿಸಿದ ಎಲ್ಲಾ ಉಪಕರಣ ಮತ್ತು parts & accessories ಗಳನ್ನು ನಿಗದಿತ ಸ್ಥಳಗಳಿಗೆ ಉತ್ತಮ ಗುಣಮಟ್ಟದಲ್ಲಿ ಸಾಗಾಣಿಕೆ ಮಾಡುವ ಜವಾಬ್ದಾರಿ ಹೊಂದಿರುತ್ತಾರೆ.
- 11.2 ಸಾಗಾಣಿಕೆ ಮಾಡುವ ಸಮಯದಲ್ಲಿ ಸೋಲಾರ್ ಉಪಕರಣಗಳ original condition ರಲ್ಲಿ ನಿಗದಿತ ಸ್ಥಳಗಳಿಗೆ ತಲುಪಿಸುವಾಗ ಸುರಕ್ಷತೆಗಾಗಿ ಮತ್ತು ಉತ್ತಮ ಮಟ್ಟದ Packing material ವ್ಯವಸ್ಥೆಯನ್ನು ಅನುಮೋದಿತ ಗುತ್ತಿಗೆ ದಾರರು ಕೈಗೊಳ್ಳುವುದು.
- 11.3 ಸೋಲಾರ್ ಉಪಕರಣಗಳ ಗುಣಮಟ್ಟ (ISC) ಹಾಗೂ Workmanship ಎಲ್ಲಾ ಹವಮಾನದಲ್ಲೂ ಸಮರ್ಪಕವಾಗಿ ಕಾರ್ಯನಿರ್ವಹಿಸುವಂತಿರಬೇಕು.
- 11.4 ಅನುಮೋದಿತ ಗುತ್ತಿಗೆ ದಾರರು ನಿಗದಿತ ವಿನ್ಯಾಸ ಹೊಂದಿರುವ ಸೋಲಾರ್ ಉಪಕರಣಗಳ ಪೂರೈಕೆ ಮತ್ತು ವಿತರಣೆಗಳನ್ನು ನಿಗದಿತ ಸ್ಥಳಗಳಿಗೆ Transportation, loading & unloading ಗಾಗಿ ಅನುಮೋದಿತ ಗುತ್ತಿಗೆ ದಾರರು ಸ್ವಂತ ಖರ್ಚಿನಲ್ಲಿ ಭರಿಸತಕ್ಕದ್ದು.
- 11.5 ಅನುಮೋದಿತ ಗುತ್ತಿಗೆ ದಾರರು ನಿಗದಿತ ಕಟ್ಟಡಗಳ ಮೇಲ್ಭಾಗದಲ್ಲಿ ಸೋಲಾರ್ ಉಪಕರಣಗಳನ್ನು ಅಳವಡಿಸುವಲ್ಲಿ ಇರುವ ಅಡೆತಡೆಗಳನ್ನು ಸುಗಮಗೊಳಿಸಿಕೊಳ್ಳುವುದು ಮತ್ತು ದೀರ್ಘಕಾಲದ ಅವಧಿಯವರೆಗೆ ಸೋಲಾರ್ ಉಪಕರಣಗಳನ್ನು ಅನುಷ್ಠಾನಗೊಳಿಸದೇ ಇರಿಸತಕ್ಕದ್ದು.

Grid Interactive Hybrid Solar Rooftop Power Plant ಘಟಕಗಳು ಅಗತ್ಯಕ್ಕಿಂತ ಹೆಚ್ಚಿನ ಸಾಮರ್ಥ್ಯದ ಸೌರ ವಿದ್ಯುಚ್ಛಕ್ತಿಯನ್ನು Grid ಮುಖಾಂತರ ಸರಬರಾಜು ಮಾಡಿದ ತರುವಾಯ ಸಂಗ್ರಹವಾಗುವ ಮೊತ್ತವನ್ನು ಪ್ರತ್ಯೇಕವಾಗಿರಿಸಿ 5 ವರ್ಷಗಳ ನಂತರ ಪ್ರಾರಂಭವಾಗುವ CMC ನಿರ್ವಹಣೆಗಾಗಿ ಉಪಯೋಗಿಸಿಕೊಳ್ಳತಕ್ಕದ್ದು.

ಈ ಯೋಜನೆಯನ್ನು ಪ್ರಾಯೋಗಿಕವಾಗಿ ಅನುಷ್ಠಾನಗೊಳಿಸುವಲ್ಲಿ ಮಾರ್ಗಸೂಚಿಯಲ್ಲಿನ ಅಂಶಗಳ ಬದಲಾವಣೆಯ ಅವಶ್ಯಕತೆ ಇದ್ದಲ್ಲಿ ಜಿಲ್ಲಾ ನೋಡಲ್ ಅಧಿಕಾರಿ ರವರ ಶಿಫಾರಸ್ಸಿನನ್ವಯ ಸರ್ಕಾರಕ್ಕೆ ಸಲ್ಲಿಸುವುದು.

ಮುಂದುವರೆದು ಅನುಷ್ಠಾನಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ ಮಾರ್ಗಸೂಚಿಯಲ್ಲಿ ಕೆಲವೊಂದು ಅಂಶಗಳು ಕೈಬಿಟ್ಟಿದಲ್ಲಿ ಎಲ್ಲಾ ಅನುಷ್ಠಾನಾಧಿಕಾರಿಗಳು ಇ-ಟೆಂಡರ್ Document ನ ಅಂಶಗಳನ್ವಯ ಕ್ರಮವಹಿಸುವುದು ಹಾಗೂ 2ನೇ ಹಂತದ ಟೆಂಡರ್ Document ನ್ನು RDPR Website - <https://rdpr.karnataka.gov.in> ನಲ್ಲಿ Upload ಮಾಡಲಾಗಿದೆ.

ತಮ್ಮ ವಿಶ್ವಾಸಿ,



ನಿರ್ದೇಶಕರು(ಗ್ರಾಮೋಸೌ-2)

ಪದನಿಮಿತ್ತ ಸರ್ಕಾರದ ಜಂಟಿ ಕಾರ್ಯದರ್ಶಿ
ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಮತ್ತು ಪಂಚಾಯತ್ ರಾಜ್ ಇಲಾಖೆ.

ಪ್ರತಿಯನ್ನು

1. ಸಂಕಲನಗಾರರು, ಕರ್ನಾಟಕ ರಾಜ್ಯ ಪತ್ರ, ಬೆಂಗಳೂರು.
2. ಮಾನ್ಯ ಗ್ರಾಅಪ ಸಚಿವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿ, ವಿಧಾನ ಸೌಧ, ಬೆಂಗಳೂರು.

3. ಆಯುಕ್ತರು, ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಇಲಾಖೆ, ಕಾವೇರಿ ಭವನ, ಬೆಂಗಳೂರು.
4. ಕಾರ್ಯನಿರ್ವಾಹಕ ನಿರ್ದೇಶಕರು, MGIRED, ಜಕ್ಕೂರು, ಬೆಂಗಳೂರು.
5. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, KSBDB, ಬೆಂಗಳೂರು.
6. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, PRED, ಆನಂದ ರಾವ್ ವೃತ್ತ, ಬೆಂಗಳೂರು.
7. ಮುಖ್ಯ ಇಂಜಿನಿಯರ್, KRRDA, ಆನಂದ ರಾವ್ ವೃತ್ತ, ಬೆಂಗಳೂರು.
8. ವ್ಯವಸ್ಥಾಪಕ ನಿರ್ದೇಶಕರು, KRIDL, ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಭವನ, ಬೆಂಗಳೂರು.
9. ಎಲ್ಲಾ ನಿರ್ದೇಶಕರು, ಗ್ರಾಅಪ ಇಲಾಖೆ.
10. ಇಲಾಖಾ ಅಂತರಿಕ ಆರ್ಥಿಕ ಸಲಹೆಗಾರರು, ಗ್ರಾಅಪ ಇಲಾಖೆ.
11. ವಿಶೇಷಾಧಿಕಾರಿ, ಗಣಕಜಾಲ, ಗ್ರಾಅಪ ಇಲಾಖೆ.
12. ಮುಖ್ಯ ಸಂಪಾದಕರು, ಕರ್ನಾಟಕ ವಿಕಾಸ, KPRC, ಬೆಂಗಳೂರು.
13. ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿ / ಸರ್ಕಾರದ ಪ್ರಧಾನ ಕಾರ್ಯದರ್ಶಿ (ಪಂ. ರಾಜ್) ರವರ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿ, ಗ್ರಾಅಪ ಇಲಾಖೆ.
14. ನಿರ್ದೇಶಕರು(ಆಡಳಿತ) / (ಅಭಿವೃದ್ಧಿ), KPRC, ಬೆಂಗಳೂರು.
15. ಉಪ ಕಾರ್ಯದರ್ಶಿ(ಆಡಳಿತ), KPRC, ಬೆಂಗಳೂರು.
16. ಆಯುಕ್ತರು, KPRC ರವರ ಆಪ್ತ ಸಹಾಯಕರು.
17. ನಿರ್ದೇಶಕರು(ಆಡಳಿತ-2), ಆಪ್ತ ಸಹಾಯಕರು, KPRC, ಬೆಂಗಳೂರು.

ಅನುಬಂಧ-1

Annexure -01 – Site Feasibility Report

Sl.	Particulars	Details
1.	Location with Address and contact details	
2.	Geo Location (Latitude and Longitude)	
3.	Type of roof (RCC/Tin Shed/Tiled roof etc.)	
4.	Condition of roof	
5.	Stairs availability	
6.	Dimension of the roof	
7.	Already utilized area of roof (for stair case/water tanks /Ventilation openings etc.)	
8.	Shadow free area in Sqft	
9.	Recommended roof top solar power plant capacity in kWp	
10.	Area required for the recommended capacity	
11.	Sanction Load in KW	
12.	Enclose latest electricity bill	
13.	Load details connecting to solar plant	

Date:

Bidder's Signature:

Place:

Name:

Company Seal:

Designation:

ಅನುಬಂಧ-2

WORK ORDER

(Notice to Proceed with the Work)

Date :

To,

Address of the Contractor

Dear Sir,

Sub :- Installation and Maintenance for Grid Interactive Hybrid Solar Rooftop Plant at Gram Panchayat Office.

Ref :- 1. Tender No. RDP/12/BGS/2020 (2nd Stage) Dated: 20-07-2020.
2. LOA Number KPRC/DD-4/BGS/22/2020 Dated: 19-10-2020.

With reference to the above, we are pleased to place our confirmed work order for supply, installation (with Five Year Warranty) and maintenance of Grid Interactive Hybrid Solar Rooftop Power Plant. You are hereby instructed to proceed with the execution of the said work in accordance with the tender conditions and also with terms and conditions as mentioned below.

SI No.	Particulars	Qty	Rate
01	Package....., Kw....., Battery Backup Hrs Supply, Installation, Commissioning, Net Metering, Testing, Maintenance and Operations of Grid Interactive Hybrid Solar Rooftop Power Plants with Five Years warranty (Including Battery)		

Terms and Conditions

1. Prices are Firm and Fixed.
2. Firm has to complete the supply & Installation within 6 months from the date of the work order.

3. Firm has to submit the 5% Bank Guarantee valid for 5 year 6 months and enter the agreement on Rs. 100 stamp paper within 15 days from the date of work order.
4. Prices inclusive of all applicable taxes.
5. Payment terms: 80 % payment will be released against delivery within 45 days from the date of submission of all documents as per tender conditions. Remaining 20% payment will be released within 45 days against installation and submission of all documents as per tender condition.
6. This work order is governed by all terms and conditions as per Tender conditions and Agreement.

Seal and Signature.

ಅನುಬಂಧ-3

PERFORMANCE BANK GUARANTEE FORMAT

To

Purchaser name and address

BG No:

Amt of Guarantee: Rs.

Guarantee Valid up to:

Date of issue:

WHEREAS contractor name ----- having its registered office at address ----- (hereinafter called the Contractor) have entered into a contract with Purchaser name & address (hereinafter called the Purchaser) being work order No.----- dt. ----- of the Purchaser, for the supply, installation and Maintenance of Grid Interactive Hybrid solar roof top power plant of -----Capacity , --- quantity of power plant for an order value of Rs. ----- (Rupees -----)

AND WHEREAS under the terms of the said contract, the contractor is to furnish the Purchaser with a Performance Bank Guarantee for the amount of Rs. ---- (Rupees -----) being (5%) of the order value.

AND WHEREAS the Contractor has requested ----- (Bank name & address) having its registered office at ----- to guarantee the due payment by the contractor of the aforesaid amount to the Purchaser.

Now ----- (Name of the Bank) hereby agree unequivocally and unconditionally to pay, on demand in writing from the Purchaser or say officer authorized by it in this behalf and without demur, any amount up to and not exceeding Rs. ----- (Rupees -----) to the Purchaser on behalf of the contractor.

This guarantee shall be valid for 66 Months and i.e. up to from the date of which the Purchaser puts the Stores into operation and shall not be terminable or affected by notice of any change in the constitution of the ---- (Name of the Bank) or of the firm of contractor or by say other reason whatsoever and our ---- (Name of the Bank) liability hereunder shall not be impaired or discharged by any extension of time or variations on alterations made, given conceded, agreed to by any extension of time or variations or alterations made, gives, conceded, agreed to with or without our knowledge or consent, by or between the parties to the said written contract.

We BANK NAME Liability under the guarantee is restricted to Rs. ----- (Rupees -----) Our Guarantee shall remain in force for 66 Months and i.e. up to Unless action to enforce a claim under this guarantee is filed against us before the expiry date all the rights of the purchaser under this guarantee shall be forfeited and we shall be relieved and discharged from all liability thereunder.

Notwithstanding anything stated herein above:

1. Our liability under this guarantee shall not exceed Rs. ----- (Rupees -----)
2. This Guarantee shall be valid for 66 Months i.e. up to
3. Our Liability to make payment shall arise & we are liable to pay the Guaranteed amount or any part thereof under this Guarantee only & only if you serve upon a written claim or demand on or before

Place:

Date:

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[To be executed on Rs. 100/- Stamp Paper]

AGREEMENT

This agreement, made on the ___ day of _____ 2020

Between

_____, [Address of the Purchaser] (hereinafter called "the Purchaser") of

the one part

And

_____ [name and address of contractor] (hereinafter called "the Contractor") on the other part.

WHEREAS the Purchaser is desirous that the Contractor execute the work of Installation and Maintenance for Grid Interactive Hybrid Solar Rooftop Plant at Gram Panchayat Office vide work number _____ (hereinafter called "the Works")

and the Purchaser has accepted the Tender by the Contractor for all execution and completion of such Works and the remedying of any defects therein vide Letter of Acceptance (LOA) No. KPRC/DD-4/BGS/22/2020 Dated: 19-10-2020.

AND WHEREAS the Purchaser has accepted to award the contract for the said Works for the capacity of _____ KW at the following rates and cost given below.

Sl.	Particulars	Unit Rate (in Rs.) (inclusive of GST)	Quantity	Unit	Amount (in Rs.) (inclusive of GST)
1.					
2.					
Total (in figures)					
Total (in Words) Rupees _____					Only

AND WHEREAS the rates stated in the hereinabove table are valid for a period of two (2) years from the LOA date.

NOW THIS AGREEMENT WITNESSETH as follows:

- 1) In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.

- 2) In consideration of the payments to be made by the Purchaser to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Purchaser to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
- 3) Purchaser hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
- 4) The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:
 - a) Letter of Acceptance;
 - b) Work Order.
 - c) Contractor's Tender;
 - d) Contract Data;
 - e) Conditions of contract (including Special Conditions of Contract);
 - f) Specifications;
 - g) Bill of Quantities; and
 - h) Any other document listed in the Contract Data as forming part of the contract.

In witness whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

For and behalf of Contractor:

Signature _____

Name _____

Title _____

Seal _____

For and behalf of Purchaser:

Signature _____

Name _____

Title _____

Seal _____

In the presence of:

Witness 1

Signature _____

Name _____

Witness 2

Signature _____

Name _____

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Implementation of Grid Interactive Hybrid Rooftop Solar Power Plants in PRIs				
Post-Delivery Inspection Check list (@ Purchaser site)				
Carried out from Technical officer nominated by RDPR				
Zilla Panchayath				
Taluk Panchayath:				
Gram Panchayath:				
Name of the Contractor:				
Work order ref no and date:				
solar Plant capacity : in Kws as per work order				
Delivery Challen No. With Date				
Solar Plant capacity : in Kws				
Project Cost in Rs:				
Date of the Pre Inspection team report:				
SL NO	ITEMS	MAKE	CAPACITY	QUANTITY
1	Solar Panel (Module)			
	a. Name of the Manufacturer of PV Module		-	-
	b. Name of the Manufacturer of solar cells		-	-
	c. Month end year of the Manufacture		-	-
	d. I-V curve for the Module		-	-
	e. Unique Serial No. and Model No. of the Module		-	-
2	Solar Module Mounting Structure	NA		
3	Array Junction Box (AJB)			
4	DC Distribution Board (DCDB)			
5	Solar Hybrid Inverter:			
6	Tubular Battery			

7	Battery Stand	NA		
8	AC Distribution Board (ACDB)			
9	Lighrning Arrestor	NA		
10	AC, DC & Earthing Cables			
11	Earthing protection Kit (Three Separate earthing for AC, DC and LA to be Provided).	NA		
12	Display Board (2feet x 1 feet)			
13	Net Meter	NA		
14	Other related Items			
15	Remarks:			

Place:& Date:

Inspection Carried out in presence of Contractor Authorised representative.

Signature of Authorised
Contractor representiv

Signature of Inspecting officer
(AuthorisedBY RDPR

Signature of the Purchaser.

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Installation of Grid Interactive Hybrid Solar Rooftop Power Plants.	
Work Completion Report (Carried Out by 3 rd Party). Date:.....	
Name of the District:	
Name of the Taluk Panchayath:	
Name of the Gram Panchayath:	
Name of the Contractor:	
Work order No. & date:	
Solar Plant capacity in Kw:	
Delivery Challan No. With Date:	
Project Cost:	Rs.
Date of Inspection Call letter submitted by Contractor:	

Solar Panel (Module) make as per LOA of the Contractor:		
a	Name of the Manufacturer of PV Module	To be enclosed with Report.
b	RFID Tag present or not	
c	I-V curve for the Module (Report should be enclosed)	
d	Unique Serial No. and Model No. of the Module	
Solar Module Mounting Structure		
a	Galvanisation Certificate from Manufacturer.	
b	RCC Size 300 mm x 300 mm	
c	MMS Steel with 3mm Thickness.	
Array Junction Box (AJB) make as per LOA of the Contractor		
1	Name of the Manufacturer:	Provided or Not
a	Made of GRP/FRP/Powder Coated Aluminium/Cast Aluminium/MS Alloy.	
b	Termination with suitable cable glands.	
DC Distribution Board (DCDB) make as per LOA of the Contractor		
1	Name of the Manufacturer:	Provided or Not
a	DC MCB for Solar Input from AJB	
b	DC SPD connected to DC Earth.	
c	DC Fuse	
Solar Hybrid Inverter: make as per LOA of the Contractor		
a	Name of the Manufacturer	
b	Capacity of Inverter	
c	Serial Number of the Inverter.	
d	Inverter is Operational or Not.	

Tubular Battery: make as per LOA of the Contractor		
a	Name of the Manufacturer	
b	Capacity of Battery at C-10 rating.	
c	Number of Batteries	
d	Serial Number of the Battery.	
e	Battery is Operational or Not.	
Battery Stand:		
a	MS stand with anti-corrosive paint provided or not.	Provided or Not.
AC Distribution Board (ACDB) make as per LOA of the Contractor		
a	Name of the Manufacturer:	Provided or Not.
b	AC SPD connected to AC Earth.	
c	AC MCB for Load Side	
d	AC MCB for Grid Input.	
e	Manual Changeover Switch for load to Grid.	
Lightning Arrestor:		
a	Connected to LA Earth.	Provided or Not.
Earthing Kit: for (AC, DC & LA)		
a	3 separate earthing for AC, DC & LA.	Provided or Not.
AC, DC & Earthing Cables / strip:		
a	Proper termination with lugs crimped.	Provided or Not.
Display Board:		
a	2 feet x 1 feet Size	Provided or Not.
Net Meter: Make, capacity,		
1	Name of the Manufacturer:	Provided or Not.
a	Calibration Test Certificate by ESCOM.	
Grid Synchronisation:		
1	Date of grid synchronisation	-----
a	System working with Grid synchronisation	
REMARKS:		
a	Work completion Inspection Report – If any defaults/ Observations. List & attach.	
b	IF all items related to work order found satisfactory.	Yes / No

Inspection carried out in Presence of Contractor Authorized representative.

**Signature of Contractor
(Authorized by Contractor)**

**Signature of Inspecting Officer
(Authorized by RDPR/ZP)**

**Signature of Authorized Escom Representative
(Authorized by ESCOM.)**

Signature of the Purchaser

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Format of Preventive Maintenance Report		
Sl No.	Particulars	Remarks
1	Cleaning of Solar Panels (Modules)	
2	Checking of working Condition	
	a. Inverter	
	b. ACDB	
	c. DCDB	
	d. AJB	
3	Checking of Earthing Voltage	
4	Cleaning & Topping of Distilled water to Battery	
5	Recording of Net Meter readings for	
	Export of Power Units	
	Import of Power Units	
6	Checking of complete working Condition of solar power plant	

Signature of the Service Engineer

Signature of the Purchaser

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TENDER CONDITIONS OF CONTRACT (CC)

(Section 5)

A. General:

1. Definitions

- 1.1. Terms which are defined in the Contract Data are also defined in the Conditions of Contract but keep their defined meanings. Bold letters are used to identify defined terms.
- 1.1.1. **“Bill of Quantities”** means the priced and completed Bill of Quantities forming part of the Tender.
- 1.1.2. **“Compensation”** events are those defined in Clause 38 hereunder.
- 1.1.3. **“Completion Date”** is the date of completion of the Works as certified by the Purchaser in accordance with Sub Clause 46.1.
- 1.1.4. **“Contract Data”** defines the documents and other information which comprise the Contract.
- 1.1.5. **“Contract”** is the contract between the Purchaser and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.2 below.
- 1.1.6. **“Contract price”** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.
- 1.1.7. **“Contractor”** is a person or corporate body whose Tender to carry out the Works has been accepted by the Employer.
- 1.1.8. **“Contractor's Tender”** is the completed Tender document submitted by the Contractor to the Employer.
- 1.1.9. **“Purchaser”** is **“Chief Executive Officer, Zilla Panchayat; Executive Officer, Taluk Panchayat; Panchayat Development Officer, Gram Panchayat; Office / Institution Head”** and includes legal successors or permitted assigns.
- 1.2. **“Days”** are calendar days; months are calendar months.
- 1.2.1. **“Defect”** is any part of the Works not completed in accordance with the Contract.
- 1.2.2. **“Defects liability period”** is the period named in the Contract Data and calculated from the Completion Date.
- 1.2.3. **“Employer”** is **“Director, Rural Infrastructure-2, Rural Development and Panchayat Raj Department, Government of Karnataka, Bengaluru”** and includes legal successors or permitted assigns.
- 1.2.4. **“Equipment”** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.
- 1.2.5. **“Initial Contract price”** is the Contract Price listed in the Employer's Letter of Acceptance.
- 1.2.6. **“Intended Completion Date”** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Purchaser by issuing an extension of time.

- 1.2.7. **“Materials”** are all supplies, including consumables, used by the contractor for incorporation in the Works.
- 1.2.8. **“Plant”** is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.
- 1.2.9. Deleted.
- 1.3. **“Site”** shall mean proposed building situated in the Gram Panchayat or any other location identified by the Purchaser for installation and maintenance of Solar RTPV plant.
- 1.3.1. **“Specification”** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Employer.
- 1.3.2. **“Start Date”** is given in the Contract Data. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Dates.
- 1.3.3. **“Variation”** is an instruction given by the Purchaser which varies the Works.
- 1.3.4. **“Works”** are what the Contract requires the Contractor to delivery and perform, as defined in the Contract Data.
- 1.3.5. **“RD&PR”** shall mean Rural Development and Panchayat Raj Department.
- 1.3.6. **“ZP, TP & GP’s”** means: Zilla panchayat, Taluka Panchayat and Gram Panchayat.
- 1.3.7. **“IEC”** means International Electro-Technical Commission.

2. Interpretation

- 2.1. In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Purchaser will provide instructions clarifying queries about the Conditions of Contract.

.. **The documents forming the Contract shall be interpreted in the following order of priority:**

- 2.2.1. Agreement
- 2.2.2. Letter of Acceptance, notice to proceed with the works
- 2.2.3. Contractor’s Tender
- 2.2.4. Contract Data
- 2.2.5. Conditions of Contract
- 2.2.6. Specifications
- 2.2.7. Drawings
- 2.2.8. Bill of quantities and
- 2.2.9. Any other document listed in the Contract Data as forming part of the Contract.

3. Law governing contract

- 3.1. The law governing the Contract is the Laws of India supplanted by the Karnataka Local Acts.
- 3.2. The Contract shall be governed by and interpreted in accordance with laws in force in India. The Courts of Bengaluru shall have exclusive jurisdiction in all matters arising under the Contract.
- 3.3. The Contract must be interpreted and read under the influence of Indian Contracts Act, 1872 and all amendments as on date

4. Purchasers decisions

4.1. Except where otherwise specifically stated, the Purchaser will decide contractual matters between the Purchaser and the Contractor.

5. Delegation

5.1. The Purchaser may delegate any of his duties and responsibilities to other people after notifying the Contractor and may cancel any delegation after notifying the Contractor.

6. Communications

6.1. Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act).

6.2. Subcontracting [Not applicable] Deleted.

7. Scope of Contract

7.1. The scope of Facility includes, but not limited to, the following:

7.2. Design, engineering, manufacturing, procurement & supply, packing and forwarding, transportation, unloading, storage, erection & installation, net-metering, testing, Commissioning of Grid Interactive Hybrid solar rooftop Power Plant at different offices across Karnataka. The make of the major items like solar panels, Batteries & solar Inverters to be supplied under this contract, should be the same make accepted in the EOI stage.

7.3 Contractor should provide all help require for documentation with the ESCOM to the Purchaser and the Purchaser will pay official fee as per ESCOM norms for NET meter application & follow up for sanction of NET meter approval. Any upgradation in the sanction load, modification in the existing Electrical setup, and all other liasoning work pertaining to the successful implementation of this project shall be in the scope of the Purchaser.

7.4 The cost towards conducting pre-dispatch inspection and post-commissioning inspection including fees / charges / etc. payable to 3rd party inspection agency / any other authority authorized to carry out inspection, will be borne by the respective Purchaser.

7.5 The cost towards payment of fees, charges, etc. to the ESCOMS will be borne by the Purchaser.

7.6 The Netmetering should be applied and sanctioned in the name of the RR Number holder.

7.7 The electrical works and electrical grid terminations should be carried out by Licensed Electrical Contractor.

8 Personnel

8.1 The Contractor shall employ sufficient and necessary technical personnel (of number and qualifications) as may be required and/or stipulated by Purchaser from time to time during the execution of the work. The technical staff so employed shall be available at site as may be required and/or stipulated by the Purchaser.

8.2 If the Purchaser asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

8.3 Purchaser's and Contractor's risks: Deleted.

8.4 Purchaser's risks: Deleted.

9 Contractor's risks

9.1 All risks of loss and/or damage to physical property and/or of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.

9.2 The Contractor shall keep the Purchaser and Purchaser's officers, Employer and Employer's officers, personnel, consultants, etc. indemnified at all times, in case any actions, claims, damages, petitions, law suites, etc., arising with this contract directly or indirectly, is/are claimed against the Purchaser, Employer by Government, Authorities, 3rd Parties, Contractor's staff, etc.

10 Insurance

10.1 The Contractor shall prior to commencing the works, effect and thereafter maintain insurances in his name (cover from the first working day after the Start Date to the end of Defects Liability Period including warranties)

10.2 Policies and certificates for insurance shall be delivered by the Contractor to the Purchaser for his approval before the Start Date. All such insurance shall provide for compensation to be payable to rectify the loss or damage incurred. All payments received from insurers relating to loss or damage shall be held jointly by the Parties and used for the repair of the loss or damage or as compensation for loss or damage that is not to be repaired.

10.3 If the Contractor fails to effect or keep in force any of the insurances referred to in the previous sub-clauses or fails to provide satisfactory evidence, policies or receipts, the Purchaser may without prejudice to any other right or remedy, effect insurance for the cover relevant to such default and pay the premiums due and recover the same as a deduction from any other monies due to the Contractor. If no payments are due, the payment of the premiums shall be a debt due.

10.4 Alterations to the terms of insurance shall not be made without the approval of the Purchaser.

10.5 The Tenderer shall comply with any and all conditions of the insurance policies.

11 Site Investigation Report

11.1 The Contractor, in preparing the tender, shall rely on any site investigation reports referred to in the Contract data, supplemented by any information available to the Tenderer.

12 Query about Contract Data

12.1 The Purchaser will clarify queries on the Contract Data.

13 Contractor to construct the Works

13.1 The Contractor shall construct the Works in accordance with the Specification and Drawings.

14 The Works to be completed by Intended Completion Date

14.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program submitted by the Contractor, as updated with the approval of the Purchaser, and complete them by the Intended Completion Date.

The contract shall remain in force for a period of 24 months (including monsoon) from the date of entering into agreement. However, the Tender accepting authority will have right to extend the period of contract if it is deemed necessary.

15 Approvals by the Purchaser

15.1 The Contractor shall submit the Site Feasibility Report with an official intimation in writing to the Purchaser.

15.2 The Purchaser shall approve the Site Feasibility Report before supply and installation.

16 Safety

16.1 The Contractor shall be responsible for the safety of all activities associated with this contract.

17 Discoveries

17.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Purchaser. The Contractor is to notify the Purchaser of such discoveries and carry out the Purchaser's instructions for dealing with them.

18 Possession of the Site

18.1 The Purchaser or shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Purchaser is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

19 Access to the Site

19.1 The Contractor shall allow the Purchaser and any person authorized by the Employer / Purchaser access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.

20 Instructions

20.1 The Contractor shall carry out all instructions of the Purchaser which comply with the applicable laws where the Site is located.

21 Procedure for resolution of disputes

If the Contractor is not satisfied with the decision taken by the Purchaser, the dispute shall be referred by either party to Arbitration tribunal within 30 days of the notification of the Purchaser's decision.

21.1 If neither party refers the dispute to Arbitration tribunal within the above 30 days, the Purchaser's decision will be final and binding.

22 Procedure for resolution of disputes

22.1 If the Contractor is not satisfied with the decision taken by the Purchaser, the dispute shall be referred by either party to Arbitration tribunal within 30 days of the notification of the Purchaser's decision.

22.2 If neither party refers the dispute to Arbitration tribunal within the above 30 days, the Purchaser's decision will be final and binding.

22.3 The Arbitration tribunal shall be conducted in accordance with the arbitration procedure stated in the Special Conditions of Contract.

B. Time Control

23 Program

23.1 Within the time stated in the Contract Data the Contractor shall submit to the Purchaser for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works.

23.2 The Purchaser's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Purchaser again at any time. A revised Program is to show the effect of Variations and Compensation Events.

24 Extension of the Intended Completion Date

24.1 The Purchaser shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date.

24.2 The Purchaser shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Purchaser for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information.

25 Delays ordered by the Purchaser

25.1 The Purchaser may instruct the Contractor to delay the start or progress of any activity within the Works.

26 Management meetings

26.1 The Purchaser or authorized staff from concerned district may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the progress achieved and the plans for remaining work.

26.2 The responsibility of the parties for actions to be taken is to be decided by the Purchaser either at the management meeting or after the management meeting and stated in writing to be distributed to all who attended the meeting.

C. Quality Control

27 Identifying defects

27.1 The Employer or Purchaser shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Purchaser may instruct the Contractor to search for a Defect and to uncover and test any work that the Purchaser considers may have a Defect.

28 Tests:

28.1 Third Party Inspecting Agency appointed by the competent authority shall conduct pre-delivery inspection and post-delivery inspection at the site in the presence of Employer / Purchasers representative. The quality inspection and the certification must be furnished in the prescribed format. The inspecting agency shall also conduct inspection of all the projects.

29 Correction of defects

29.1 The Purchaser shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

29.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Purchase's notice.

30 Uncorrected defects

30.1 If the Contractor has not corrected a Defect within the time specified in the Purchaser's notice, the Purchaser will assess the cost of having the Defect corrected, and such Defect correction cost will be recovered from the Tenderer's Contract.

D. Cost Control

31 Bill of Quantities (BOQ)

31.1 The BOQ shall contain list of items.

31.2 Deleted.

32 Variations

32.1 The Purchaser shall have power to order the Contractor to do any or all of the following as considered necessary or advisable during the progress of the work by him

32.1.1 Increase or decrease of any item of work included in the Bill of Quantities (BOQ);

32.1.2 Omit any item of work;

32.1.3 Change the character or quality or kind of any item of work;

32.1.4 Change the levels, lines, positions and dimensions of any part of the work;

32.1.5 Execute additional items of work of any kind necessary for the completion of the works; and

32.1.6 Change in any specified sequence, methods or timing of construction of any part of the work.

- 32.2 The Contractor shall be bound to carry out the work in accordance with any instructions in this connection, which may be given to him in writing by the Purchaser and such alteration shall not violate or invalidate the contract.
- 32.3 Variations shall not be made by the Contractor without an order in writing by the Purchaser, provided that no order in writing shall be required for increase or decrease in the quantity of an item appearing in the BOQ so long as the work executed conforms to the approved drawings.
- 32.4 The Contractor shall promptly request in writing the Purchaser to confirm verbal orders and if no such confirmation is received within 15 days of request, it shall be deemed to be an order in writing by the Purchaser.

33 Payment for Variations

- 33.1 Since this is a fixed cost contract, the Purchaser shall not make any additional payments for any variation in the bill of material which are required to meet the site conditions to successfully commission and operationalize the project.

34 Submission of bills for payment

- 34.1 Not applicable.
- 34.2 Not applicable.
- 34.3 Not applicable.
- 34.4 The bills in triplicate should be submitted on completing the following stages of work along with reports in the prescribed formats.
- 34.4.1 Delivery Challan duly certified by the Purchaser (or any authority authorized by the Purchaser).
- 34.4.2 Pre-dispatch Inspection Report duly certified by Employer (or any authority authorized by the Employer). The Pre-dispatch Inspection shall be carried out at Bengaluru only.
- 34.4.3 "Installation, Netmetering and Commissioning Report along with Photograph, Latitude and Longitude" duly signed and stamped by the "Purchaser (or by the authority authorized by the Purchaser)"
- 34.4.4 "3rd Party Inspection Agency appointed by the Employer", certifying the commissioning of the project at site including Netmetering.
- 34.4.5 The bills in triplicate should be submitted to the Purchaser. The payment will be made by the Purchaser.

35 Payments

- 35.1 Payments shall be adjusted for deductions for recoveries in terms of the contract and taxes, at source, as applicable under the law. The Purchaser shall pay the Contractor within 60 days of submission of bill with respect to clause no. 30.2 of G.C. The expenditure towards the third-party inspection will be borne by the Purchaser.
- 35.2 Not applicable.

35.3 Stage 1 - 80% of the contract value will be paid against successful delivery of all Bill of Materials at site along with submission of the following documents to the Purchaser:

35.3.1 Invoice in triplicate.

35.3.2 Delivery Challan duly certified by the Purchaser (or any authority authorized by the Purchaser).

35.3.3 Pre-dispatch Inspection Report duly certified by Employer (or any authority authorized by the Employer).

35.3.4 Acknowledgement Copy of the application submitted to respective ESCOM for Netmetering.

35.4 Stage 2 (Final Stage) - 20% of the contract value will be paid against installation, testing, netmetering and commissioning of the project at site along with submission of the following documents certified by the District Nodal Officer

35.4.1 Invoice in triplicate.

35.4.2 "Installation, Netmetering and Commissioning Report" duly certified by the Purchaser (or any authority authorized by the Purchaser).

35.4.3 Copy of synchronization certificate for the Plant issued by ESCOM.

35.4.4 Post-Commissioning Inspection Report duly certified by the "3rd Party Inspection Agency appointed by the Employer".

35.5 In case of any delay in the Commissioning and Synchronization of the Plant for reasons not attributable to the bidder, the Purchaser may at his discretion release the Stage 2 (final stage) 30% payment against submission of Bank Guarantee of equivalent amount by the bidder valid for a period of 5 years. Within 30 days of completion of the Commissioning and Synchronization of the Plant by bidder, the Purchaser shall release the Bank Guarantee back to the bidder.

35.6 Comprehensive Maintenance Contract (CMC) – 1/5th of the CMC contract value will be paid after the completion of one (1) year CMC period along with submission of the following documents certified by the Purchaser

35.6.1 Invoice in triplicate

35.6.2 Preventive Maintenance Reports duly certified by the Officer Incharge at Site / Purchaser.

35.6.3 CMC Completion Report duly certified by the Officer Incharge at Site / Purchaser.

35.7 Compensation events: Not applicable.

36 Tax

36.1 The rates quoted by the Contractor shall be deemed to be inclusive of applicable GST and other taxes that the Contractor will have to pay for the performance of this Contract. The Purchaser will perform such duties in regard to the deduction of such taxes at source as per applicable law.

36.2 Price Adjustment: Not applicable.

37 Liquidated damages

- 37.1 The Contractor shall pay liquidated damages to the Purchaser at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the Contract Data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Purchaser may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages does not affect the Contractor's liabilities.
- 37.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Purchaser shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment of bill.

37. Advance Payments: Not applicable.

38. Securities:

- 38.1 The Security deposit (including additional security for unbalanced tenders) shall be provided to the Purchaser no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and type of instrument acceptable to the Purchaser. The Security deposit shall be valid until a date not less than six (6) months from the date of expiry of Defects Liability Period and the additional security for unbalanced tenders shall be valid until a date not less than 6 months from the date of issue of the certificate of completion.

39. Cost of repairs:

- 39.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

40. Finishing of Contract

41. Completion

The Contractor shall request the Purchaser to issue a Certificate of Completion of the Works and the Purchaser or the representative authorized by the Purchaser will do so upon deciding that the Work is completed.

42. Taking Over

The Purchaser shall take over the Site and the Works within seven days of issuing a certificate of Completion.

Final account : Deleted.

43. As built drawings and/or Operating and Maintenance Manuals

To be submitted by the Contractor prior to commissioning the project.

44. Termination

The Purchaser may terminate the Contract if the Contractor causes a fundamental breach of the Contract.

Fundamental breaches of Contract include, but shall not be limited to the following:

- i. the Contractor stops work for 30 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Purchaser;
 - ii. the Purchaser instructs the Contractor to delay the progress of the Works and the instruction is not withdrawn within 60 days;
 - iii. The Contractor becomes bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - iv. the Purchaser gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Purchaser;
 - v. the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
 - vi. if the Contractor, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in the executing the Contract.
 - vii. The Purchaser may without prejudice to any other remedy for breach of Terms and Conditions of Tender, by written notice of one month, terminate the contract stating reasons thereof.
- b. For the purpose of this paragraph: “corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.”
- c. BLACK-LISTING of defaulting contractors:
- i. The Purchaser reserves the right to BLACK-LIST any Contractor for breach of any of the Terms and Conditions of the tender.
 - ii. Such BLACKLISTED CONTRACTOR AND HIS ESTABLISHMENT will not be eligible to participate in any of the Purchaser’s tenders for subsequent 5 years.
 - iii. Non-execution of agreements when his offer/s is/are accepted.
 - iv. Recurrent delay in executing the work.
 - v. Supply of quantity less than what is claimed in the bill.
- d. When either party to the Contract gives notice of a breach of contract to the Purchaser for a cause other than those listed under Sub Clause 49.2 above, the Purchaser shall decide whether the breach is fundamental or not.
- e. Notwithstanding the above, the Purchaser may terminate the Contract for convenience.
- f. If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

45. Payment upon termination

- a. If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Purchaser shall prepare bill for the value of the work done less advance payments received up to the date of the bill, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. If the total amount due to the Purchaser, exceeds any payment due to the Contractor, the difference shall be a debt payable to the Purchaser.
- b. If the Contract is terminated at the Purchaser's convenience or because of a fundamental breach of Contract by the Purchaser, the Purchaser shall prepare bill for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract, and less taxes due to be deducted at source as per applicable law and make payment accordingly.

46. Property

- a. All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Purchaser, if the Contract is terminated because of a Contractor's default.

47. Release from performance

- a. If the Contract is frustrated by any event entirely outside the control of either the Purchaser or the Contractor the Purchaser shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made.

48. Special Conditions of Contract

49. Labour

- a. The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.
- b. The Contractor shall, if required by the Purchaser, deliver to the Purchaser a return in detail, in such form and at such intervals as the Purchaser may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Purchaser may require.

50. Compliance with Labour regulations

- a. During continuance of the contract, the Contractor and his subcontractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law

(including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. The Contractor shall keep the Employer and Purchaser indemnified in case any action is taken against the Employer and Purchaser by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer and/or Purchaser is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, Purchaser shall have the right to deduct any money due to the Contractor including his amount of security deposit. The Purchaser shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer or Purchaser.

- b. The employees of the Contractor in no case shall be treated as the employees of the Employer / Purchaser at any point of time.

51. Protection of environment

- a. The contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. During continuance of the contract, the contractor shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.

52. Arbitration (Clause 24)

- a. The procedure for arbitration shall be as follows:
 - i. As per Circular of G.O. No. LAW 273 LAC 2012(p) Dated : 10-01-2014 “Any dispute or Difference or claim arising out of or in connection with or relating to the present contract or the breach, termination or invalidity there of shall be referred and settled under the Arbitration Centre – Karnataka (Domestic & International) Rules 2012, by one or more arbitration appointed in accordance with its rules”.

The cost and expenses of arbitration proceedings will be paid as determined by the Arbitrator. However, the expenses incurred by each party in connection with the preparation, presentation, etc., shall be borne by each party itself.

- ii. Performance under the contract shall continue during the arbitration proceedings and payments due the Contractor by the Purchaser shall not be withheld, unless they are the subject matter of the arbitration proceedings.

53. In the case of the death of a contractor after executing the agreement / commencement of the work, his legal heir, if an eligible registered contractor and willing can execute and complete the work at the accepted tender rates irrespective of the cost of the work.

54. FSD & Difference Cost will be released after the completion of defect liability period and grace period of 90 days.

55. Copyright and Patent

- a. The copyright in all drawings, documents and other materials containing data and information furnished to the Purchaser by the Contractor herein shall remain vested in the Purchaser. The Purchaser shall be free to reproduce all drawings, documents, specification and other material furnished to the Purchaser for the purpose of the Contract including, if required, for MAINTAINANCE of the Facilities.
- b. The Contractor shall indemnify the Employer and Purchaser against third party claims of infringement of patent, trademark or industrial design rights arising from use of goods or any part thereof in India.

56. Confidential Information

- a. The Purchaser and the Contractor shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following termination of the Contract.
- b. The obligation of a party under this clause, however, shall not apply to that information which:
 - i. Now or hereafter enters the public domain through no fault of Contractor party.
 - ii. Can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party hereto.
 - iii. Otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.
- c. The above provisions of this Clause shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Facilities or any part thereof.
- d. The provisions of this Clause shall survive termination, for whatever reason, of the Contract.

57. Design and Engineering

a. Specifications and Drawings

- i. The Contractor shall execute the basic and detailed design and engineering work in compliance with the provisions of the Contract, or where not so specified, in accordance with good and sound engineering practice not lesser than established current standard industry practice.
- ii. The Contractor shall be responsible for any discrepancies, errors or omissions in the specifications, drawings and other technical documents that it has prepared, whether such

specifications, drawings and other documents have been approved by the Department or not.

b. Codes and Standards

- i. Technical Specifications set out in the Tender document shall form part of this Contract. The Contract shall be executed in compliance of the codes and standards set out in Technical Specifications, the new edition or the revised version of such codes and standards current at the date of Bid submission shall apply unless otherwise specified. However, the Contractor may use equipment's/materials exceeding the standard mentioned.

58. Transportation

- a. The Contractor shall at its own risk and expense transport all the Plant and Equipment and the Contractor's Equipment to the Site by the mode of transport that the Contractor judges most suitable under all the circumstances.

59. Packing and Marking

- a. The Contractor shall be responsible for securely protecting and packing the Plant & Equipment as per prescribed standards in force to withstand the journey and ensuring safety of materials and also arrival of materials at destination in original condition and good for contemplated use. Packing case size & weight shall take into consideration the remoteness of the goods final destination and absence of heavy material handling facilities at all points in transit.

60. Materials and Workmanship

- a. All materials shall be of the best quality and workmanship capable of satisfactory operation under the operating and climatic conditions as may be specified. Unless otherwise specified, they shall conform in all respect to the latest edition of the relevant IS codes specification wherever Indian specifications apply or IEC codes.
- b. The Contractor shall supply & deliver all equipment and materials for installation at Site. The Contractor shall arrange for transportation, loading & unloading of materials at Project Site at his own cost & risk.

61. Site Regulations and Safety

- a. The Contractor shall have to provide necessary and adequate safety measures including personal protective equipment and precautions to avoid any accident, which may cause damage to any equipment/ Material or injury to workmen. The Purchaser shall not be responsible for any accidents at the Project Site.

62. Site Clearance

- a. Site Clearance in Course of Performance
 - i. In the course of carrying out the Contract, the Contractor shall keep the Site reasonably free from all unnecessary obstruction, store or remove any surplus materials, clear away any wreckage,

rubbish or temporary works from the Site, and remove any Contractor's Equipment no longer required for execution of the Contract.

b. Site Clearance after Completion

- i. After Completion of all parts of the Facilities, the Contractor shall clear away and remove all wreckage, rubbish and debris of any kind from the Site, and shall leave the Site and Facilities clean and safe.

63. Test Certificates

- a. The PV modules/ Inverters/ cables and other Balance of system equipment deployed in the solar PV power plant shall have test certificates for their qualification as per specified BIS & IEC/ IS Standards by one of the NABL Accredited Test Centers in India/International test centers

64. Negligence by Contractor

If the Contractor neglects to supply Equipment or construct the Plant with necessary infrastructure, with due diligence and expeditiousness or refuses or neglects to comply with any reasonable order given to it in writing by the Purchaser or contravenes any provisions of the Contract, the Purchaser may give (7) seven days notice in writing to the Contractor, to make good the failure, neglect or contravention complained of. If the Contractor fails to comply with the notice within reasonable time depending on the nature of affected work, which is evaluated by the Department from the date of serving thereof, in the event of failure, neglect or contravention capable of being made good within that time, then in such case, if the Purchaser thinks fit, it shall be lawful for it to take the Plant and Equipment wholly or in part, out of the Contractor's hand and give it to another person on Contract at current market price and the Purchaser shall be entitled to retain

- a. any balance which may be otherwise due on the Contract by it to the Contractor or such part thereof as may be necessary, to the payment of the cost with respect to such acquisition as aforesaid.
- b. If the cost of executing the work as aforesaid shall exceed the balance due to the Contractor and the Contractor fails to make good such deficiency, the Purchaser shall have the right to appropriate the Performance Security in addition to take action in the manner it may consider deem fit in terms of the Contract including black-listing the Contractor.

65. Statutory Compliances, Acts and Rules

- a. The Contractor shall comply with all Applicable Laws or ordinances, codes, approved standards, rules, and regulations and shall procure and maintain their validity all necessary Municipal, Panchayat and Government permits & licenses etc. at its own cost.
- b. The work shall be executed in conformity with Indian Electricity Act 2003, Central Electricity Authority Regulations, Explosive Act 1948, Petroleum Act 1934, National Building Code, hazardous waste management rules 2009, e – waste (Management& Handling) rules 2011 and relevant Rules/ Acts in vogue at the time of execution including MAINTAINANCE period.
- c. The Contractor shall take necessary permissions from Karnataka State Pollution Control Board prior to using any hazardous material during construction or as part of the plant. It is the responsibility of the Contractor to dispose such or resultant hazardous materials as per the Acts and Rules of Karnataka State Pollution Control Board at their own risk and cost.

66. Insurance

- a. During the Contract period and warranty period all insurance related expenses shall be borne by the Contractor.
- b. The goods supplied under the Contract shall be fully insured against the loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in such a manner that Purchaser shall not incur any financial loss, as long as the plant continues to remain under the custody of the Contractor.
- c. In case of any loss or damage or pilferage or theft or fire accident or combination of the said incidents etc. under the coverage of insurance, the Contractor shall lodge the claim as per rules of insurance. Any FIR required to be lodged to local Police Station shall be the responsibility of the Purchaser. RD&PR, ZP, TP&GP'S office will provide all help & support of documents if required.
- d. The Contractor shall arrange to supply/ rectify/ recover the materials even if the claim is unsettled for timely Completion of the Project. The final financial settlement with the insurer shall be rested upon the Contractor.
- e. In case of any delay of the project attributable to the Contractor, the Contractor himself in consultation with Purchaser should take the extension of insurance. Any financial implications shall, however, be borne by the Contractor.
- f. The Contractor should arrange for providing insurance coverage to its workmen under Workmen's Compensation Act or similar Rules and Acts as applicable during execution of work for covering risk against any mishap to its workmen. The Contractor shall also undertake a Third-Party Insurance. The Purchaser will not be responsible for any such loss or mishap.
- g. All other insurance like All Risk, insurance against theft and acts of GOD, as required for the construction and MAINTAINANCE of the plant and to indemnify the Purchaser/ equipment/material and resources shall be borne by the contractor. Fire insurance is to be arranged by the Contractor up to FIVE years of MAINTAINANCE of the Facility.
- h. The insurance is suitably taken for the activity/ act which is required to cover all the risk associated to the activity / act. The Contractor shall be responsible to take suitable insurance till the completion of the MAINTAINANCE up to Guarantee period and indemnify the Purchaser from all associated risks.
- i. During the MAINTAINANCE period, the insurance coverage against theft, fire, burglary, act of GOD, terrorist activities, etc. shall be taken. The insurance premium shall be borne by the Contractor for the term of this Contract.
- j. The Contractor shall provide comprehensive insurance for the Solar RTPV plant commissioned for a period of 5 years from the date of certification of post-commissioning inspection.

67. Guarantee

- a. PV modules used in grid connected solar power plants must be Guaranteed for peak output wattage, which should not perform at rated capacity of lesser than 90% at the end of 10 years and 80% at the end of 25 years.

- b. The modules shall be guaranteed for at least 5 years for failures due to material defects and workmanship.
- c. Grid Interactive Hybrid Inverters shall be guaranteed for five years from the date of installation or the Guarantee period provided by the original equipment manufacturer, whichever is higher.
- d. The mechanical structures, electrical equipment's, works and overall workmanship of the grid connected solar power plant must be guaranteed for a minimum of 05 years.
- e. The Contractor must ensure that the goods supplied under the Contract are new, unused and of most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract.
- f. During the period of Guarantee the Contractor shall remain liable to replace any defective parts, that becomes defective in the plant, of its own manufacture or that of its Sub-contractors, under the conditions provided for by the Contract under and arising solely from faulty design, materials or workmanship, provided such defective parts are not repairable at Site. After replacement, the defective parts shall be returned to the Contractors works at the expense of the Contractor.
- g. At the end of guarantee period, the Contractor's liability shall cease. In respect of goods not covered by the first paragraph of this clause, the Purchaser shall be entitled to the benefit of such guarantee given to the Contractor by the original contractor or manufacturer of such goods.
- h. During the MAINTAINANCE and guarantee period, the Contractor shall be responsible for any defects in the work due to faulty workmanship or due to use of sub- standard materials in the work. Any defects in the work during the guarantee period shall therefore, be rectified by the Contractor without any extra cost to the Purchaser within a reasonable time as may be considered from the date of receipt of such intimation from the Purchaser failing which the Purchaser shall take up rectification work at the risk and cost of the Contractor.

i. Preventive / Routine Maintenance

- i. This shall be done by the Contractor once in a 3 month and shall include activities such as cleaning and checking the health of the Solar PV system, cleaning of module surface, topping of battery with distilled water, tightening of all electrical connections, and any other activity including the associated civil works. Preventive Maintenance report (along with Yearly Performance Ratio / Capacity Utilization Factor of the Plant) should be submitted to Employer and Purchaser within 10 days of completion of Preventive Maintenance.
- ii. Water will be provided by department for cleaning purpose. The purchaser will provide permanent facility to access the Roof of the building in case there is no staircase/Ladder is available in the building for maintenance.

j. Breakdown / Corrective maintenance

- i. Whenever a fault has occurred, the Contractor has to attend to rectify the fault & the fault must be rectified within 48 hours" time from the time of occurrence of fault.

68. Risk Purchase

- a. If the Contractor fails, on signing of the Contract, to take up the work within a reasonable period or leave the work Site after partial execution of the work, the Purchaser shall have the liberty to get the work done through other agency at the Contractor's own risk and additional cost if any has to be borne by the Contractor. If the situation, so warrants, to compel the Purchaser to cancel the Contract, it shall be liable to compensate the loss or damage, which the Purchaser may sustain due to reasons of failure on Contractor's part to execute the work in time.
- b. Further, based on reviewing the Project based on the approved Project Schedule, if the progress is below expectation as demanded by the Purchaser then the Purchaser reserves right to reduce the scope of the Contractor in part or full and assign the same to other contractor(s) and get the work done at the risk and cost of the existing Contractor.

69. Pre-Dispatch Inspection (PDI)

- a. The Contractor shall intimate the Employer regarding their readiness for pre-dispatch inspection provided that not less than 15% of the allotted cumulative capacity is manufactured and ready at the factory / warehouse at Bengaluru for carrying out pre-dispatch inspection.
- b. Not more than four (4) pre-dispatch inspections will be carried out at each allotted district.
- c. The Employer shall appoint Competent Authority / Pre-dispatch Inspection sub-committee who shall carry out the pre-dispatch inspection.
- d. The pre-dispatch inspection will be carried out at the factory / warehouse of the Tenderer / OEM at Bengaluru only.

70. Post Commissioning Inspection (PCI)

- a. The Contractor shall intimate the Purchaser regarding their readiness for Post Commissioning Inspection provided that a minimum of 25% of the allotted cumulative capacity at district level has been supplied, installed, netmetered, tested and commissioned at the sites.
- b. Not more than four (4) post commissioning inspections will be carried out at each allotted district level.
- c. The Employer shall appoint 3rd Party Inspection Agency / Team, who shall carry out the post commissioning inspection.

TECHNICAL SPECIFICATIONS

(Section 7)

Grid Interactive Hybrid Solar Rooftop Power Plants

A. Configuration of Solar Plant

1. The configuration of Solar Plant with one (1) hour batter backup is as follows:

Sl. No	Grid interactive Hybrid rooftop Solar power plant capacity in KW	Grid Interactive Solar Hybrid inverter in KW	Total Minimum VAH of Low Maintenance Tubular battery	Battery backup hour's	Remarks
1	2	3	4	5	6
1	1KW – 1Phase	1KW	1800 VAH	1 HOUR	The make of the major items like solar panels, Batteries & solar Inverters to be supplied under this contract, should be the same make accepted in the EOI stage
2	2KW - 1Phase	2KW	3600 VAH	1 HOUR	
3	3KW - 1Phase	3KW	5760 VAH	1 HOUR	
4	4KW - 1Phase	4KW	7200 VAH	1 HOUR	
5	5KW- 1Phase	5KW	9600 VAH	1 HOUR	
6	10kW – 3Phase	10kW	19200 VAH	1 HOUR	

2. The configuration of Solar Plant with two (2) hours batter backup is as follows

Sl. No	Grid interactive Hybrid rooftop Solar power plant capacity in KW	Grid Interactive Solar Hybrid inverter in KW	Total Minimum VAH of Low Maintenance Tubular Battery	Battery backup hour's	Remarks
1	2	3	4	5	6
1	1KW – 1Phase	1KW	3120 VAH	2 HOUR	The make of the major items like solar panels, Batteries & solar Inverters to be supplied under this contract, should be the same make accepted in the EOI stage
2	2KW - 1Phase	2KW	6240 VAH	2 HOUR	
3	3KW - 1Phase	3KW	9600 VAH	2 HOUR	
4	4KW - 1Phase	4KW	12480 VAH	2 HOUR	
5	5KW- 1Phase	5KW	14400 VAH	2 HOUR	
6	10kW – 3Phase	10kW	28800 VAH	2 HOUR	

3. The capacity of the system is defined as the total capacity of solar modules.

- The grid Interactive Hybrid solar PV power plant comprises of solar PV modules with Hybrid inverter should have inbuilt MPPT should charge the battery and converts solar DC power to AC power & feeds AC power to electrical loads and feeding the excess generated electricity to the grid of Distribution Licensee through NET metering facility. The connectivity should be as per BESCOM Guidelines as per KERC (Implementation of solar rooftop Photovoltaic power plants) Regulations 2016.
- The plant should be sized based on the availability of shade free area for installing solar module array and the feasibility to connect to the grid by the distribution licensee.
- The system should be connected to the mains -Single phase/ three phase - through a net/export-import meter tested and approved by a lab approved by the Distribution Licensee. Another Energy meter (or existing unidirectional meter) also has to be installed between the Inverter and the point of interconnection, to record electricity generated from Solar power plant.

7. Technical compliance certificate/ Test report from the approved laboratory of MNRE, NABL, IEC, BIS accredited has to be submitted for the main system components (solar PV module, Hybrid Inverter & Tubular Battery) of all the models proposed.
8. Grid Interactive Hybrid Solar Photo Voltaic (SPV) power plant consists of SPV array, Module Mounting Structure, Battery bank, & Hybrid Solar Inverter, AJB, DCDB, ACDB, L.A, Earth kits, Interconnect cables & Civil works. PV Array is mounted on a suitable structure. The Grid Interactive Hybrid SPV power plant should be designed to charge the battery bank as well as feed the excess power to the grid. Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box, switches, Hybrid Solar Inverters etc., should conform to the BIS or IEC or international specifications, wherever such specifications are available and applicable.

B. Solar PV Modules

1. Only crystalline silicon cell PV modules of 300Wp or higher capacity (Indian Module) should be used in the power plant.
2. Each PV module used in any solar power project must use a RF identification tag (RFID), which must contain the following information. The RFID can be inside or outside the module laminate, but must be able to withstand harsh environmental conditions.
 - 2.1. Name of the manufacturer of PV Module
 - 2.2. Name of the manufacturer of Solar cells
 - 2.3. Month and year of the manufacture (separately for solar cells and module)
 - 2.4. Country of origin (separately for solar cell and module)
 - 2.5. I-V curve for the module
 - 2.6. Peak Wattage, I_m , V_m and FF for the module
 - 2.7. Unique Serial No. and Model No. of the module
 - 2.8. Date and year of obtaining IEC PV module qualification certificate
 - 2.9. Name of the test lab issuing IEC certificate
 - 2.10. Other relevant information on traceability of solar cells and module as per ISO 9000 series
3. The following details should be provided on the module
 - 3.1. Name of the manufacturer
 - 3.2. Month and year of manufacture
 - 3.3. Rated Power at STC
 - 3.4. V_{mp} , I_{mp} , V_{oc} , I_{sc}
4. The PV modules must conform to the latest edition of any of the following IEC /equivalent BIS Standards for PV module design qualification and type approval: Crystalline Silicon Terrestrial PV Modules: IEC 61 215 / IS14286. In addition, the modules must conform to IC 61730 Part 1 requirements for construction and Part 2 requirements for testing for safety qualification or equivalent IS.
5. PV modules interconnection diagram shall be provided for each type of package mentioned in Section 9.

C. Warranties for SPV Modules

1. Material Guarantee:

- 1.1. The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than five (05) years from the date of sale to the original customer ("Customer")
- 1.2. Defects and/or failures due to manufacturing
- 1.3. Defects and/or failures due to quality of materials
- 1.4. Non-conformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this Guarantee, the manufacturer will repair or replace the solar module(s), at the owners sole option

2. Performance Guarantee:

- 2.1. The predicted electrical degradation of power generated by SPV modules not exceeding 20% of the minimum rated power over the 25 year period and not more than 10% after ten years period of the full rated original output.

D. Battery Bank

1. Batteries should be Low maintenance Tubular lead acid battery confirming to the standard of IS 13369 (NABL test report as per IS 13369 should be enclosed along with the Bid.)
2. Battery Bank should be designed to meet 1 hour / 2 hour backup for the rating of the Solar Hybrid inverter and total VAH should not be less than as mentioned in solar system configuration.
3. Suitable Anti corrosive paint coated Metal battery stand should be provided along with the battery
4. Battery make should be any one of the approved brand as per Karnataka Government E-Governance Notification No. DPAR/50/EGM/2019-DS-dparegovsec (G.O.No. DPAR 50 EGM 2019 Dated: 06.09.2019). The battery make shall be as accepted during the EOI stage.
5. Batteries used are to be of C10 rating which are more suitable for solar applications.

E. Grid Interactive Hybrid Solar Inverter

1. Hybrid Inverter OEM qualification criteria
 - 1.1. The make of the inverter should have been empaneled in BESCOM. In case inverter manufacturer is empaneled with BESCOM but the manufacturer could not renew the empanelment due to lockdown, the bidder can submit the inverter manufacturer empanelment issued earlier by BESCOM along with the acknowledgment of Renewal Application and Processing Fee submitted to BESCOM by the inverter manufacturer. The bidder will be empaneled in the EOI subject to the bidder submitting the renewal of inverter manufacturer empanelment with BESCOM, which should be submitted by the Bidder to the Employer, prior the last date of submission of bid stated in the tender schedule, failing which the bid submitted by the bidder will be treated as non-responsive.
 - 1.2. The OEM should have Min 15 service centres across the state of Karnataka.
 - 1.3. The OEM should have installed Hybrid inverters of cumulative 2.5 MW capacity in any Government organization during past 5 years.
2. Hybrid solar inverter should be a combined unit comprising of MPPT charge controller, visual display, necessary protections and provision to export excess power to Grid and with option of blocking the export.
 - 2.1. It should have Integrated MPPT Charge Controller. In case of MPPT charge controller is not built-in inside the Inverter, IEC 62093 test certificate should be provided separately for charge controller as per BESCOM technical standards.
 - 2.2. It should not over charge the batteries once all the batteries are fully charged.
 - 2.3. It should sustain both the temperature during winter and summer season
 - 2.4. It should have protection from over voltage, under voltage, over current protection.
 - 2.5. It should have short circuit protection.
 - 2.6. It should be rated for continuous operation at full load.
 - 2.7. It should have solar priority grid charging.

Sl.	Feature	Minimum Specification
1.	Switching elements	IGBT /MOSFET
2.	Type of Charge Controller	MPPT charge controller
3.	Nominal Inverter Capacity	1-Phase : 1kW,2kW,3kW,4kW and 5kW 3-Phase : 10kW
4.	Nominal Array Capacity	Equivalent/More to the Inverter capacity

Sl.	Feature	Minimum Specification
5.	Maximum DC Voltage	180 V DC for 1-phase inverters and 1000V DC for 3-phase inverter.
6.	Mpvt Voltage range	65 V- 115 V DC for 1-phase inverters 400V-800V DC for 3-Phase inverters
7.	Battery nominal Volt	≤ 60 V. Due to space constraint and as per MNRE Guidelines in view of safety above 60V DC is not accepted.
8.	Inverter Surge Rating @ 40 deg C	105% > 10 sec
9.	Inverter Output Voltage	230V +/- 1% for single phase (During solar/Battery mode) 415V +/- 1% for three phase (During solar/Battery mode)
10.	Inverter Output Frequency (Synchronization range)	50+/- 0.5 Hz (Synchronized to Mains during grid export operation)
11.	Grid synchronization Voltage range	170V - 260V. (Inverter should charge the battery & Inverter Should able to work at this voltage range.)
12.	Grid Frequency range	50 Hz (47 to 53 Hz)
13.	Inverter Efficiency @ 40 deg C, Nominal load	Above 80% for 1 kw & 2 kw Above 90 % for 3 kw ,4kw, 5kw & 10 kw
14.	Operating Ambient Temperature	0 to 50 deg C
15.	Humidity	95% max. non condensing
16.	Enclosure	IP 20, powder coated
17.	Cooling	Forced air cooling
18.	Protection	Short Circuit, Overload Over Temperature Over Voltage / Under Voltage
19.	Output wave form	Pure Sine wave
20.	Mounting Type	Wall Mounting only to save the floor space and also for easy visibility of inverter operation.
21.	Dimension	<ul style="list-style-type: none"> Upto 5kW - (DXWXH) 200X310X500 in mm (preferred due to space constraint) 10kW - (DXWXH) 175X500X650 in mm (preferred due to space constraint) Inverters with upto 50% more than above dimensions are acceptable subject to space constraints at site.
22.	Grid Charger capacity	Suitable to charge the battery and feed to Inverter simultaneously. minimum 10% to the battery AH capacity to be provided to charge the battery
23.	IEC Test Certificates from lab as per below standards should be enclosed along with the bid.	
24.	Environmental Testing-	IEC 60068-2 (1,2,14,30)
25.	Efficiency Measurements	IEC 61683
26.	Safety Measurement	IEC 62109-1 & IEC 62109-2
27.	Anti-Islanding Protection and utility interface	IEC 62116:2014 and IEC 61727:2004
28.	Electromagnetic compatibility & electromagnetic interference of inverter	IEC 61000-3, IEC 61000-4

In case of delay in installing the net meter there should be provision to block the export of power to grid.

F. Module Mounting Structure

1. Module mounting structure should be installed on the roof. Modules shall be mounted on a non-corrosive support structures towards suitable direction and inclination to maximize annual energy output. Support structure design and foundation or fixation mounting arrangements should withstand horizontal wind speed up to 150 km/hr. Module mounting structure designed to install solar panels should be made of 3mm MS hot dip galvanized. Thickness of galvanizing should be 120 µm (Microns). Minimum clearance of Solar panels from roof should be 300 mm in case of RCC roof and it may vary based on the type of roof these modules are installed. All fasteners used to fix solar panels with module mounting structure should be of SS 304. All exposed metallic parts should be properly grounded.
 - 1.1. Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed.
 - 1.2. Anti-theft bolts should be used to fix the PV modules
 - 1.3. The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759.
 - 1.4. Structural material shall be corrosion resistant and electrolytic ally compatible with the materials used in the module frame, its fasteners, nuts and bolts. Aluminum structures also can be used which can withstand the wind speed of respective wind zone. Necessary protection towards rusting need to be provided either by coating or anodization.
 - 1.5. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels. The MMS should be grouted to RCC roof & civil foundation with RCC of minimum size 300mm x300mm.
 - 1.6. If RCC roof is not capable to withstand drilling holes / if the roof is different other than RCC, suitable module mounting structure to be designed and suitable arrangements has to be done for installation as per site conditions.
 - 1.7. The mounting structure steel shall be of minimum 3mm thickness.
 - 1.8. The drawing of the same shall be submitted by the bidder along with the site feasibility report.
 - 1.9. The Module Mounting Structure installation to be made according to site conditions by adopting best practices for its durability and long life.
 - 1.10. Base plate of MMS is to be of dimension 250mm×250 mm with concrete bed dimension of 300mm×300mm.

G. Array Junction Boxes (AJB)

1. The Array junction boxes are to be provided in the PV array for termination and connecting cables for series and parallel configuration. The Array Junction Boxes (AJBs) shall be made of GRP/FRP/Powder Coated Aluminium /cast aluminium/M.S alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands.

H. DC Distribution Board (DCDB)

1. DC distribution board (DCDB) shall be provided in between hybrid solar inverter and AJB. It should be equipped with suitable rating of DC MCB, for solar input from array junction box and fuse of suitable rating between hybrid solar inverter and battery and suitable capacity SPD and DC fuse should be provided and DC SPD should be connected to DC earth, all switches, circuit breakers and connectors should comply with IEC 60947/IS 60947. DCDB incoming shall have suitable fuse having rating equal to solar array I_{sc} rating.
2. DCDB Grounding to be in compliance with class-2 category.
3. Each Junction Box shall have High quality Suitable capacity fuse.

I. AC Distribution Board

1. AC Distribution Board (ADB) shall control the AC power from hybrid solar inverter and should have necessary AC SPD connected to AC earth.
2. All switches and the circuit breakers, should conform to IEC 60947,
3. Manual changeover switch from dedicated load to grid of suitable capacity should be provided to transfer the dedicated load to grid in case of power plant failure/Maintenance, any cabling work should be undertaken for bifurcation of load by the bidder as part of the project.
4. All the Panels shall be metal clad, totally enclosed, rigid, wall mounted, air - insulated, cubical type suitable for operation on three phase/single phase, 415 or 230 volts, 50 Hz
5. Suitable capacity AC circuit breaker for load side and for grid input to be provided.
6. Cable size and ratings for interconnection of equipments for each type of package shall be provided.

J. Cables

1. Cables of appropriate size to be used in the system shall have the following additional characteristics:
 - 1.1. Shall meet IEC 60227/IS 694/IEC 60502/IS1554 standards
 - 1.2. Temp. Range: -10 deg C to +80 deg C. Voltage rating 660/1000V
 - 1.3. Excellent resistance to heat, cold, water, oil, abrasion, UV radiation and Flexible
 - 1.4. Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop (power loss) of the entire solar system to the minimum. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use.
 - 1.5. Cabling from customer main panel to inverter and from inverter to loa distribution is in bidder scope.
 - 1.6. Segregation or bifurcation/Extra cabling of load wiring as per the inverter capacity in bidder scope.
 - 1.7. Organizations should adhere to the standard cable ratings specified.

K. Lightning Arrestor

1. The SPV power plants shall be provided with lightning Arrestor. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV array shall be suitably protected against Lightning by deploying Lightning Arrestor connecting to suitable earth.

L. Earthing Protection

1. Three separate earthing for AC side, DC side and LA to be provided
2. Each array structure of the PV yard should be grounded/ earthed properly. In addition, the lightning arrester/masts should also be earthed inside the array field, hybrid solar inverter, ACDB and DCDB should also be earthed properly.
3. Earth resistance shall not be more than 5 ohms.

M. Safety Measures

1. The bidder shall take entire responsibility for electrical safety of the installation(s) including connectivity with the grid and follow all the safety rules & regulations applicable as per BESCO norms.
2. Outdoor and indoor conductors to be housed through HDPE material for safety.

N. Operation Manual

1. An Operation, Instruction and Maintenance Manual in English should be provided with the Solar PV Power Plant. The detailed diagram of wiring and connection diagrams should also be provided with the manual.

O. Display Board

1. A display board of appropriate size of MS is to be erected at the plant site indicating;

Capacity of Solar Power Plant:

Promoted by: Zilla panchayath _____ Rural Development & Panchayat Raj Dept
Government of Karnataka.

Name of the Supplier: M/s.....,

Contact numbers:

P. NETMETER

1. Contractor should provide all help require for documentation with the ESCOM to G.P /RDPR. GP/RDPR will pay official fee as per ESCOM norms for NET meter application and follow up for NET meter approval. Any up gradation in the sanction load, modification in the existing Electrical setup, and all other liasoning work pertaining to the successful implementation of this project shall be in the scope of the GP/RDPR department.
2. Net meter to be installed as per ESCOMs approved list based on territories.

Q. Others

1. All the MCBs used to be of Double pole type.

R. Training of End User

1. The supplier/contractor shall train the users for the operation & maintenance of the plant.
