



# **Technical Appendix 9.2: Third Octave Predicted Noise Levels**

Cossans Solar & BESS EIA Report

**TRIO POWER Limited** 

Prepared by:

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#### **Revision Record**

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#### 1.0 Third Octave Predicted Noise Levels

| NSR1Third         | Octave Too                           | ality Tort  |       |       |       |       |                   |       |       |       |       |               |       |       |       |       |         |          |       |        |         |       |       |       |       |       |
|-------------------|--------------------------------------|-------------|-------|-------|-------|-------|-------------------|-------|-------|-------|-------|---------------|-------|-------|-------|-------|---------|----------|-------|--------|---------|-------|-------|-------|-------|-------|
| 101121111111      | OCIANE TO                            | namely read | 15d   | В     |       |       |                   |       |       | 8dB   |       |               |       |       |       |       |         |          | 5d    | iΒ     |         |       |       |       |       |       |
| Z5 to 125         |                                      |             |       |       |       |       | 160 to 400        |       |       |       |       | 500 to 10,000 |       |       |       |       |         |          |       |        |         |       |       |       |       |       |
| 25Hz              | 31.5Hz                               | 40Hz        | 50Hz  | ⊞Hz   | 80Hz  | 200Hz | 129Hz             | 160Hz | 200Hz | 250Hz | 319Hz | 400Hz         | 500Hz | 630Hz | 800Hz | 3kHz  | 1.25kHz | 1.6kHz   | 2kHz  | 2.5kHz | 3.15kHz | 4kHz  | 5kHz  | 63kHz | 8kHz  | 10kHz |
| 36.4              | 34                                   | 30.8        | 318   | 29.6  | 29.7  | 26.9  | 26                | 20    | 15.4  | 128   | 10.3  | 13.7          | 13.7  | 13.1  | 17    | 15.2  | 12.7    | 11.1     | 7     | 3      | -4.7    | 14.8  | 27.9  | 50.6  | - 79  | 80.2  |
|                   |                                      |             |       |       |       |       |                   |       |       |       |       |               |       | _     |       |       |         |          |       |        |         |       |       |       |       |       |
|                   | -24                                  | -32         | 1     | -22   | 0.1   | -2.8  | 0.9               | -6    | 4.6   | -26   | -25   | 3.4           | 0     | 0.6   | 3.9   | -1.8  | 2.5     | -1.6     | 4.1   | -4     | -7.7    | 10.1  | -13.1 | -22.7 | 28.4  | -1.2  |
| 2.4               | 3.2                                  | -1          | 2.2   | -0.1  | 2.8   | 0.9   | 6                 | 4.6   | 26    | 25    | -3.4  | 0             | 0.6   | 3.9   | 1.8   | 2.5   | 1.6     | 4.1      | 4     | 7.7    | 10.1    | 13.1  | 22.7  | 28.4  | 1.2   |       |
| FALSE             | FALSE                                | FALSE       | FALSE | FALSE | FALSE | FALSE | FALSE             | FALSE | FALSE | FALSE | FALSE | FALSE         | FALSE | FALSE | FALSE | FALSE | FALSE   | FALSE    | FALSE | FALSE  | FALSE   | FALSE | FALSE | FALSE | FALSE | FALSE |
| 25Hz              | 31.5Hz                               | 40Hz        | 50Hz  | ⊕Hz   | 80Hz  | 100Hz | 129Hz             | 160Hz | 200Hz | 250Hz | 319Hz | 400Hz         | 500Hz | 630Hz | 800Hz | 1kHz  | 1.25kHz | 1.6kHz   | 2kHz  | 2.9kHz | 3.15kHz | 4kHz  | 5kHz  | 63kHz | 8kHz  | 10kHz |
| NSR2 Third        | Octave Ton                           | nality Test | 164   |       |       |       |                   |       |       | 9.4B  |       |               |       |       |       |       |         |          | 50    | in     |         |       |       |       |       |       |
| 15dB<br>25 to 125 |                                      |             |       |       |       |       | 8dB<br>160 to 400 |       |       |       |       |               |       |       |       |       |         | 500 to 1 |       |        |         |       |       |       |       |       |
| 25Hz              | 31.5Hz                               | 40Hz        | 50Hz  | GHz   | 80Hz  | 100Hz | 1294z             | 160Hz | 200Hz | 250Hz | 319Hz | 400Hz         | 500Hz | 630Hz | 800Hz | 1kHz  | 1.25kHz | 1.6kHz   | 2kHz  | 2.5kHz | 3.15kHz | 4kHz  | 5kHz  | 63kHz | 8kHz  | 10kHz |
| 36.1              |                                      | 30.6        | 313   | 29.2  |       | 25.8  | Z5.2              | 19.4  | 14.7  |       |       | 13.8          | 13.6  | 13    | 15.7  | 14.8  |         | 10.7     | 6.6   |        |         |       |       |       |       | 80.2  |
|                   |                                      |             |       |       |       |       |                   |       |       |       |       |               |       |       |       |       |         |          |       |        |         |       |       |       |       |       |
|                   | -24                                  | -3.1        | 0.7   | -21   | 0.1   | -3.5  | 0.6               | 5.8   | -4.7  | -24   | -24   | 3.9           | 0.2   | 0.6   | 3.7   | -1.9  | -2.5    | -1.6     | 4.1   | -4     | -8.1    | 10.6  | -14.3 | 24.9  | 24.7  | -0.2  |
| 2.4               | 3.1                                  | -0.7        | 21    | -0.1  | 3.5   | 0.6   | 5.8               | 4.7   | 24    | 2.4   | -3.9  | 0.2           | 0.6   | 3.7   | 1.9   | 2.5   | 1.6     | 4.1      | 4     | 8.1    | 10.6    | 14.3  | 24.9  | 24.7  | 0.2   |       |
| FALSE             | FALSE                                | FALSE       | FALSE | FALSE | FALSE | FALSE | FALSE             | FALSE | FALSE | FALSE | FALSE | FALSE         | FALSE | FALSE | FALSE | FALSE | FALSE   | FALSE    | FALSE | FALSE  | FALSE   | FALSE | FALSE | FALSE | FALSE | FALSE |
| 25Hz              | 31.5Hz                               | 40Hz        | 50Hz  | GHz   | 80Hz  | 100Hz | 129Hz             | 160Hz | 200Hz | 250Hz | 319Hz | 400Hz         | 500Hz | 630Hz | 800Hz | 1kHz  | 1.25kHz | 1.6kHz   | 2kHz  | 2.5kHz | 3.15kHz | 4kHz  | 5kHz  | 63kHz | 8kHz  | 10kHz |
|                   |                                      |             |       |       |       |       |                   |       |       |       |       |               |       |       |       |       |         |          |       |        |         |       |       |       |       |       |
|                   | NSR3 Third Octave Tonality Test 15dB |             |       |       |       |       | 8dB               |       |       |       |       | SdB           |       |       |       |       |         |          |       |        |         |       |       |       |       |       |
| Z5 to 125         |                                      |             |       |       |       |       | 500 to 10,000     |       |       |       |       |               |       |       |       |       |         |          |       |        |         |       |       |       |       |       |
| 25Hz              | 31.5Hz                               | 40Hz        | 50Hz  | €Hz   | 80Hz  | 100Hz | 129Hz             | 160Hz | 200Hz | 250Hz | 319Hz | 400Hz         | 500Hz | 630Hz | 800Hz | 1kHz  | 1.25kHz | 1.6kHz   | 2kHz  | 2.9kHz | 3.15kHz | 4kHz  | 5kHz  | 63kHz | 8kHz  | 10kHz |
| 29.8              | 27.3                                 | 24.1        | 25.1  | 22.8  | 22.9  | 20.2  | 19.2              | 13.2  | 119   | 8.9   | 6.1   | 7.7           | 7.4   | 6.4   | 7.9   | 5.3   | 1.7     | -1.6     | 8.4   | -16.7  | -31.2   | 51.9  | -77.7 | -80.2 | -80.2 | 80.2  |
|                   |                                      |             |       |       |       |       |                   |       |       |       |       |               |       |       |       |       |         |          |       |        |         |       |       |       |       |       |
|                   | -25                                  | -32         | 1     | -23   | 0.1   | - 2.7 | -1                | -6    | -13   | -3    | -28   | 16            | 0.3   | - 1   | 1.5   | 2.6   | 3.6     | 3.3      | 6.8   | 8.3    | 14.5    | 20.7  | 25.8  | -2.5  | 0     | 0     |
| 2.5               | 3.2                                  | - 1         | 23    | -0.1  | 2.7   | 1     | 6                 | 1.3   | 3     | 2.8   | -16   | 0.3           | 1     | -1.5  | 2.6   | 3.6   | 3.3     | 6.8      | 8.3   | 14.5   | 20.7    | 25.8  | 2.5   | 0     | 0     |       |
| FALSE             | FALSE                                | FALSE       | FALSE | FALSE | FALSE | FALSE | FALSE             | FALSE | FALSE | FALSE | FALSE | FALSE         | FALSE | FALSE | FALSE | FALSE | FALSE   | FALSE    | FALSE | FALSE  | FALSE   | FALSE | FALSE | FALSE | FALSE | FALSE |
| 25Hz              | 31.5Hz                               | 40Hz        | 50Hz  | ⊞Hz   | 80Hz  | 100Hz | 129Hz             | 160Hz | 200Hz | 250Hz | 319Hz |               | 500Hz |       |       |       | 1.25kHz | 1.6kHz   | 2kHz  |        | 3.15kHz | 4kHz  |       | 63kHz |       | 10kHz |



