# tuning and commissioning

## CREDIT 4

## INDIVIDUAL BUILDING PORTFOLIO

## PROJECT NAME: [NAME]

## PROJECT NUMBER: GS- [####]

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| --- | --- | --- | --- |
| TOTAL POINTS AVAILABLE: | 2 | POINTS CLAIMED: | [#] |

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| --- | --- | --- | --- | --- |
| No. | **Type** | **Criteria** | **Description** | **Claimed** |
| 4.1 | **Action** | **Comprehensive Tuning Process** | **1 poin**t is available where a comprehensive tuning process addressing nominated building systems is in place during the performance period. | [#] |
| 4.2 | **Action** | **Commissioning and Recommissioning** | **1 point** is available where best practice commissioning and recommissioning practices are in place during the performance period. | [#] |

# Project-specific technical questions

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| There are no project-specific technical questions for this credit. |  |
| There are project-specific technical questions for this credit and all responses received from the GBCA are attached. |  |

4.1 Comprehensive tuning process

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| Was a comprehensive tuning process addressing nominated building systems of the base building in place during the performance period? | **[Y/N]** |

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| The project achieved one (1) point in the previous Certification and **no changes** have been made to the tuning and commissioning during the performance period that would have an impact on the comprehensive tuning process, the compliance requirements can be considered to be met.  ***Complete sections 4.1.3*** |  |
| One (1) point was not targeted / awarded in the previous Certification.  ***Complete sections 4.1.1 and 4.1.2.*** |  |

Describe the following elements of the comprehensive tuning process in place for the project.

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| 4.1.1 Periodic audits and reporting  Demonstrate how the periodic audits of the existing systems include techniques used to evaluate and identify performance of monitored points and associated systems, including:   * Conflicts between systems; * Out of sequence operation of system components; * Energy and water usage profiles; * Obsolete functional control; * Errant time scheduling; and * Opportunity for adaptive control. |  |
| **4.1.2 Action plan and documentation**  Demonstrate that the action plan leading to continuous monitoring, system testing, corrective action response, and ongoing measurement includes the following items:   * A timeline for correction of operational issues and deficiencies identified, including:   + Identification of operational errors and recommended training to help ensure errors are not duplicated; and   + Repairs and maintenance needed to retain performance. * The frequency of tuning, review and analysis. |  |
| Demonstrate that documentation includes update procedures for ‘Operations Manuals’ or ‘Logbook’ to include all modifications performed, the revised settings as appropriate, and the reasoning for the modifications from the original system. |  |
| Demonstrate that documentation includes the production of periodical reports on the performance of nominated building systems. |  |
| Demonstrate that documentation includes the commissioning procedures. |  |

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| **4.2.4** Describe the frequency of tuning, review, and analysis of the comprehensive tuning processes which have occurred during the performance period. |  |

Identify where this information can be found within the supporting documentation provided.

|  |  |
| --- | --- |
| **Supporting Documentation**  (Name / title / description of document) | **Reference**  (Page no. or section) |
| #### | [####] |
| #### | [####] |

DISCUSSION

Outline any issues you would like to highlight and clarify with the Certified Assessor(s).

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4.2 Commissioning, recommissioning or retrocommissioning

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| The project achieved one (1) point in the previous Certification and **no changes** have been made to the nominated building systems during the performance period that would have an impact on the project operating requirements, the compliance requirements can be considered to be met.  ***Complete sections 4.2.4*** |  |
| One (1) point was not targeted / awarded in the previous Certification.  ***Complete the relevant section below (4.2.1, 4.2.2 or 4.2.3).*** |  |

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| Describe the Project Operating Requirements (POR), outlining the operational and performance requirements for the nominated building systems |  |

Please select one of the below compliance pathways:

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| --- | --- |
| The building has been occupied for less than 5 years.  **Please complete section 4.2.1.** |  |
| The building has been occupied for 5 to 10 years.  **Please complete section 4.2.2.** |  |
| The building has been occupied for greater than 10 years.  **Please complete section 4.2.3.** |  |

4.2.1 For buildings occupied less than 5 years

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| --- | --- |
| **4.2.1.1a.** Demonstrate that the building has been commissioned at completion in accordance with AIRAH DA27 and DA28, or equivalent commissioning standard. |  |
| **4.2.1.1b.** Demonstrate that a recommissioning plan and appropriate implementation process been developed, in accordance with AIRAH DA27 and DA28 or equivalent commissioning standard. |  |
| **4.2.1.1.c** Provide evidence that the building seeking Green Star – Performance certification is already certified under one of the Green Star As Built rating tools, and at least one (1) point was achieved in the relevant ‘Commissioning’ or ‘Tuning’ credit. |  |
| **4.2.1.2** Where the building was initially commissioned, but a *recommissioning* plan was not developed as part of that process, demonstrate that a *recommissioning* plan has been developed in accordance with AIRAH DA27 and DA28 during the *performance period* |  |

4.2.2 For buildings occupied for 5 to 10 years

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| **4.2.2.1a**. Demonstrate that a recent review of all *nominated building systems* has been carried out against the Project Operating Requirements (POR), in accordance with AIRAH DA27 and DA28, or equivalent commissioning standard, during the past five years. |  |
| **4.2.2.1b.** Demonstrate that the nominated building systems were found to be performing in line with the POR for the building. |  |
| **4.2.2.2** Where the nominated building systems were found not to be performing in line with the POR for the facility as a result of the review, demonstrate that the building systems have gone through a recommissioning or retrocommissioning process in accordance with AIRAH DA27 and DA28 or equivalent commissioning standard, to bring the systems into alignment with the current operating requirements for the building. |  |

4.2.3 For buildings occupied longer than 10 years

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| **4.2.3.1a.** Demonstrate that a review of the performance of all nominated building systems against the Project Operating Requirements (POR) or the desired performance requirements, has been carried out in accordance with AIRAH DA27 and DA28 or equivalent commissioning standard at some point during the past 10 years. |  |
| **4.2.3.1b.** Demonstrate that the nominated building systems were found to be performing in line with the POR or the desired performance requirements for the building. |  |
| **4.2.3.2** Where the nominated building systems were found to not be performing in line with the POR or the desired performance requirements for the facility, demonstrate that the building systems have gone through a recommissioning or retrocommissioning process in accordance with AIRAH DA27 and DA28 or equivalent commissioning standard, to bring them into alignment with the desired operating requirements for the building. |  |

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| **4.2.4** Describe the frequency of tuning, review, and analysis of the commissioning, recommissioining or retro-commissioning reviews which have occurred during the performance period. |  |

Identify where this information can be found within the supporting documentation provided.

|  |  |
| --- | --- |
| **Supporting Documentation**  (Name / title / description of document) | **Reference**  (Page no. or section) |
| #### | [####] |
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DISCUSSION

Outline any issues you would like to highlight and clarify with the Certified Assessor(s).

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DECLARATION

I confirm that the information provided in this document is truthful and accurate at the time of completion.

Provide author details, including name, position and email address:

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|  |

[Date]