Government Baseline Building Performance Report Guide

This is an informative guide and has been provided to assist the Mechanical Team Member in developing the Government Baseline Building Performance Report. The Mechanical Team Member must develop the report and include it in Part Six of the RFP before release. The Energy Design Reduction Technical Evaluation Factor in the DB selection process requires the prospective offerors to perform an HVAC simulation of their proposed building and submit their results with a comparative analysis to the Government Baseline Building Performance Report. The government baseline is required to conform to ASHRAE Normative Appendix G Performance Rating Method as per UFC 1-200-02 HIGH PERFORMANCE AND SUSTAINABLE BUILDING REQUIREMENTS and is performed along with the HVAC LCCA best value selection before RFP release. The information required in the report is to be comprised of select baseline inputs and outputs pulled from the analysis of the government HVAC LCCA best value selection. Select only baseline inputs from what is required by Appendix G to be the same for both the baseline and the proposed. Use the ASHRAE 90.1 2013 Performance Rating Method Compliance Report to provide baseline outputs. Leave the proposed portion blank. Below are suggestions for the report but they are not meant to be all-inclusive or exact to all situations and therefore the editor needs to apply personal judgement in the selection of information. The overall intent of the report is to provide enough baseline information to the prospective offerors so that they can produce comparable results for their proposed facility. Remove this guide from the DB RFP and replace it with your Government Baseline Building Performance Report before the DB RFP release.

Suggested outline:

Government Baseline Simulation Inputs:

The following list is outlined the same as Table G3.1 of ASHRAE 90.1 2013 Appendix G.

1. Design Model
   Include number of floors and floor area of all conditioned spaces.

2. Additions and Alterations
   If this project involves a renovation or addition to an existing facility then provide a brief description of what existing spaces was included and what was excluded in the government model.

3. Space Use Classification
   Building or space type lighting classification per ASHREA 90.1 - 9.5.1 or 9.6.1.

4. Schedules
   Define hourly usage as used in your simulation program. Do not use proprietary schedule types.

   Include schedules that directly control air dry-bulb and wet-bulb set points.
   - Indoor Design Conditions
   - Summer DB, RH
5. Building Envelope
   Include approximation of total envelope surface area.

6. Lighting
   Include same categorization method.
   - Watts per area
   - Schedule per area

7. Thermal Blocks—HVAC Zones Designed
   N/A

8. Thermal Blocks—HVAC Zones Not Designed
   Include approximation of each zone area and gross surface areas off outside walls, floors and roofs.

9. Thermal Blocks—Multifamily Residential Buildings
   N/A

10. HVAC Systems
    Include baseline selections based on climate zone. State climate zone.

11. Service Hot-Water Systems
    Include energy performance and energy source information if using service hot water.

12. Receptacle and Other Loads
    Include the loads used in the baseline building simulation.

13. Modeling Limitations to the Simulation Program
14. Exterior Conditions
Include exterior conditions used in the baseline building simulation.

15. Distribution Transformers
N/A

Baseline Simulation Outputs:
Fill in the ASHRAE 90.1 2013 Performance Rating Method Compliance Report to provide baseline outputs.

- Project information:
Enter Name with the project number, Address and, principle heating source. Leave the rest blank.

- Space Summary:
Input conditioned and unconditioned air for each zone. Make sure the required zones per ASHRAE 90.1 are included and the same as the HVAC LCCA best value selection analysis.

- Advisory Messages:
Enter not met hours. Make sure they are in the acceptable range with ASHRAE 90.1.

- Simulation General:
Enter in “See Baseline Inputs sheet.”

- Energy and Cost Summary by Fuel Type
Enter Energy Type and Baseline Building. If end use not applicable then enter “NA.”

- Energy Summary by End Use
Enter Baseline Building. If energy type not applicable then enter “NA.”