

REFERENCES

NAVFAC CAPITAL IMPROVEMENTS GOV ENERGY BASELINE & OFFERORS MODEL PERFORMANCE RATING ASSUMPTIONS (PRA)

The GOV Energy Baseline and Offerors Model Performance Rating Assumptions shall be utilized for technical evaluation factor six (6), Energy & Sustainable Design. This summary shall serve no other purpose. The assumptions listed here shall not be considered as RFP requirements.

BASELINE BUILDING PERFORMANCE RATING ASSUMPTIONS

The GOV Energy Baseline Report provides a rough order of measure estimate of the “Baseline” (Code Minimum) energy consumption for this project, based on ASHRAE Std 90.1-2010 Appendix G. The proposer is advised that the goal for this project is to reduce estimated annual energy consumption by 30% less than ASHRAE 90.1-2010 as calculated in accordance with US Code of Regulations 10 CFR 433, 434, 435 dated Dec. 4, 2006.

The Gov Baseline building for this model has been simplified for evaluation purposes. The Baseline building is assumed to be a typical facility of the type indicated, of the same size and in the same ASHARE Climate Zone as the project location. The Gov Baseline is a parametric model based on these simplified parameters. The Gov baseline does not reflect all of the specific requirements of the RFP.

OFFERORS PERFORMANCE RATING ASSUMPTIONS

The following assumptions and clarifications should be considered before proceeding with a Proposed Building simulation:

The offerors Proposed Building energy model shall reflect the offerors proposed building, meeting or exceeding all requirements of the RFP. The model shall use the modeling rules of ASHRAE 90.1-2010 Appendix G. The model shall use the following assumptions within the model as appropriate:

Weather Data:

- Weather location shall be based on TMY Weather Data for Quantico, VA.

Space Occupancy:

- Refer to the Room Requirements Sheets in Part 2 and the drawings in Part 6 to determine the number of occupants on a space-by-space basis. Model occupancy based on the actual planned use of the spaces as indicated by furniture layouts on the drawings rather than code maximums.

Space Schedules:

- Lighting Schedule: ASHRAE 90.1-2010, Space Usage Classification: Office Occupancy Table G-G (ASHRAE 90.1-2010 User Guide)
- Thermostat Schedule: ASHRAE 90.1-2010, Space Usage Classification: Office Occupancy Table G-G (ASHRAE 90.1-2010 User Guide)
- People Occupancy Schedule: ASHRAE 90.1-2010 Space Usage Classification: Office Occupancy Table G-G (ASHRAE 90.1-2010 User Guide)
- Elevator Schedule: ASHRAE 90.1-2010 Space Usage Classification: Office Occupancy Table G-G (ASHRAE 90.1-2010 User Guide)

Design Temperatures:

- Occupied temperature setpoints shall be in accordance with RFP Part 3 D30. Unoccupied space temperature setpoints shall be modeled as follows:
 - All occupied spaces unless otherwise noted: 81 deg F cooling, 66 deg F heating.
 - Data rooms, server rooms, control rooms: no setbacks
 - Spaces that are heated and ventilated only: no setbacks

Infiltration Assumptions:

- Infiltration shall be included on perimeter zones only. If the offeror proposes to use air barriers with testing to 0.25 cfm/ft² (envelope) at 0.3" WG, he may simulate tight building construction. If the offeror proposes to use air barriers with testing to 0.15 (or lower) cfm/ft² (envelope) at 0.3" WG, he may simulate zero building infiltration. Note that while these credits may be taken to demonstrate EPA Act compliance, there is no standardized methodology to take credit for reductions of infiltration in LEED. Do not take credit for reductions in infiltration when assessing LEED EAc1 point feasibility unless the methodology has been vetted by USGBC/GBCI.

Additional Space Loads:

- Model all office and breakout room spaces with 2 W/sf miscellaneous plug loads unless otherwise noted in the RFP. Model all classroom and conference room spaces with 1 W/sf miscellaneous plug loads unless otherwise noted in the RFP. Model the war room with 5 W/sf miscellaneous plug loads. Refer to the Room Requirements Sheets in Part 3 for plug loads in the data rooms and server rooms.

Domestic Water Heating:

- Service Hot Water ASHRAE 90.1-2010 Space Usage Classification: Office Occupancy Table G-G (ASHRAE 90.1-2010 User Guide)

Academic Instruction Facility, TECOM Schools
Marine Corps Base, Quantico, Virginia

- Domestic Water peak hourly demand in gallons per minute: Use 2012 International Plumbing Code (IPC) water supply fixture units Table E103.3 Approach.
- Domestic Water daily demand based on gallons per minute: Peak hourly demand divided by a factor of 3 for the Daily Demand.

Miscellaneous:

- Exterior Lighting shall be modeled per ASHRAE 90.1-2010 Table 9.4.3B.

Utility Rates:

- The electric utility rate (burdened) for MCB Quantico FY16 is \$0.071/kWh. No demand charges shall be considered.
- The natural gas utility rate (burdened) for MCB Quantico FY16 is \$0.469/therm.

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