

COMPREHENSIVE DESIGN SUPPORT TECHNICAL SHEET

Custom Program



Comprehensive Design Support offers services and incentives to owners/customers and their building design professionals (architectural and engineering) to work with the Program from the conceptual design stage of the new construction, major renovation, or building addition projects. The Program provides guidance from energy efficiency experts, technical assistance in analysis of energy-efficient design options, and help in identifying the potential alternative energy efficiency measures/designs to consider. Incentives are provided to the customer's design team to help compensate for the work/analysis necessary to assess and evaluate alternative design considerations and for incorporation of energy efficiency measures into the final building design, in accordance with the building owner's decisions.

Projects eligible for Comprehensive Design Support include:

1. Any new construction or major renovation project of 50,000 conditioned square feet or more, or
2. Projects encompassing a minimum of 150 tons of cooling capacity and 75 kW of lighting load.

In addition, the Program offers Modified Comprehensive Design Support and Technical Assistance:

1. Projects which have progressed beyond schematic design and smaller projects going through LEED certification may receive pro-rated incentives under Design Support.
2. Smaller projects not attempting LEED certification may receive technical assistance and advice from the program at no cost to the customer.

The Comprehensive Design Support incentive rules and processes are structured to support participation in the LEED rating system, if the customer so desires. However, the Program energy baseline will be compatible with the most recently adopted Maryland State Building Code, which references ASHRAE 90.1-2013.

The Comprehensive Design Support Application requires that a Memorandum of Understanding (MOU) be signed by the Owner and Design Team Lead. The MOU details participation, incentives, and requirements for each phase of the process.

All projects **MUST** receive pre-approval before purchasing equipment or beginning work. Please review the program process and eligibility requirements on the [program website](#) as well as the [Terms and Conditions](#). Please contact the program office with any questions.

How to Apply:

1. **Customer completes and submits the application via the online [Application Center](#). Pre-approval is required before proceeding. The following supporting information must also be included with the application:**
 - Completed and signed [Terms and Conditions \(T&Cs\)](#)
 - Completed and signed Memorandum of Understanding
2. **The Program reviews submitted documentation, revises and/or requests additional documentation as necessary. A site inspection may be required as part of the pre-approval process.**
3. **The Program emails the project pre-approval to the customer and design team lead. Upon pre-approval notice from the Program, the customer schedules the Brainstorming meeting with Program representative(s).**
4. **Upon completion of each phase of the Comprehensive Design Support process, supporting documentation as noted in the MOU is submitted to the Program for review and approval. Phases I through III of the process must be completed within six (6) months of the pre-approval date.**
5. **The Program distributes the incentive check to the payee following final approval processing.**

INCENTIVES

PHASE I - BRAINSTORMING

Brainstorming the opportunities to make the building more efficient in the Conceptual Design Phase. Parties to the Brainstorming include the building owner, the design team, and the Program representative(s). The Brainstorming meeting will:

1. Review the design intent and available architectural, electrical, and mechanical plans,
2. Determine party responsible for building simulation,
3. Discuss proposed building base case design,
4. Discuss criteria for ASHRAE 90.1-2013 Appendix G baseline model,
5. Establish modeling software to be used for building simulation,
6. Determine energy efficiency measures to be evaluated, and
7. Discuss enhanced commissioning.

Up to \$1,000 based on building conditioned square footage (sq. ft.)

INCENTIVES (CONTINUED)	
PHASE II – SIMULATION ANALYSIS	
<p>Simulation Analysis is performed by the design team and will evaluate the proposed building base design and alternative efficiency measures agreed to during the Brainstorming session. Approved modeling software includes DOE2.1E, eQUEST (DOE2.2), Trane Trace, Carrier HAP, and EnergyPlus, or a comparable 8,760 hour modeling software acceptable to the Program. Selection of measures to be incorporated into the final design shall be made by the building owner and design team, and interactive modeling of the measures will be performed. The final interactive model will be compared to an ASHRAE 90.1-2013 Appendix G baseline model and must result in energy savings over the baseline building model. A bonus for achieving 20% utility cost performance improvement (16% for major renovation projects) will be paid upon completion of Phase III.</p>	<p>1st 50,000 sq. ft. conditioned area - \$0.10 per sq. ft. Additional conditioned area - \$0.03 per sq. ft. Bonus of \$0.02 per sq. ft. conditioned area (capped at \$10,000) if performance improvement is achieved</p>
PHASE III – FINAL DESIGN	
<p>Final Design will incorporate the selected energy efficiency measures/designs according to the decisions of the building owner after presentation of the findings and recommendations that result from the building simulation analysis. Once final design documents are complete, applications for incentives must be submitted and pre-approved by the Program before purchase or installation.</p>	<p>Up to \$8,000, based on building conditioned sq. ft. and measures incorporated in the areas of lighting, HVAC, custom, building envelope, and central plant/chiller</p>
PHASE IV – ENHANCED COMMISSIONING	
<p>Enhanced Commissioning is performed by a third party commissioning agent (CA). At minimum, with respect to the systems selected for commissioning, the CA must review construction documents at 50% and 100%, submittals, prepare or review systems manual, verify training, and review operation and performance with building owner 6-10 months after completion.</p>	<p>Up to \$8,000, based on building conditioned sq. ft. and the cost of Enhanced Commissioning</p>

Delmarva Power Energy Savings for Business Program
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EmPOWER Maryland programs are funded by a charge on your energy bill. EmPOWER programs can help you reduce your energy consumption and save you money. To learn more about EmPOWER and how you can participate, go to delmarva.com/business.