**Energy Performance Contract (EPC) Timeline**

1. **Contracting Agency makes decision to potentially use EPC**
2. **Back of Envelope (BOE) Phase - 3-6 months**

The BOE is the first step of the EPC process. It is a high level audit of a few buildings to determine if there is a viable project and to select the Energy Services Company (ESCO) to be your energy partner. There are several important considerations, including an understanding of a few next steps in the EPC process, which are factors in a decision to proceed with the BOE:

* + - * 1. The Intent is to select a partner not a project
				2. If you move forward, you can perform the Investment Grade Audit (IGA), also known as the Technical Energy Audit (TEA) on additional facilities. One cannot manage what is unknown. This detailed audit allows the Agency to appreciate and prioritize from a full range of scope that could be accomplished in a project and which meet the requirements of the Virginia Code for EPC
				3. A larger project allows the leveraging of utility and operational savings (actually avoided costs) for infrastructure upgrades. When items are bundled together in a larger project the quick payback items will fund the long term payback items to produce a project that pays for itself within the 15 year term of the contract. (For state agencies, 15 years is the maximum financing term. Localities may be able to finance for up to 20 years.)
				4. The final project selection comes at the end of the IGA/TEA phase where the performance numbers will be fixed
1. *DMME works with Agency to begin the BOE process*
2. DMME and Agency hold initial meeting to discuss the EPC process
* DMME provides the Agency the “EPC Roadmap” Packet (electronically and hard copy)
* DMME reinforces the current contract requirements (ie, use of CO7DB, energy special terms and conditions, CO9DB, etc., which cannot be modified without DGS’ prior approval).
1. Agency selects a minimum of 4 ESCOs from the list of DEB contractors (included in the EPC Roadmap Packet)
2. Agency selects one or more facilities to include in the BOE
3. DMME works with the Agency to gather 3 years of utility bills for the buildings included in the BOE
4. Agency fills out Facility Information worksheet (see item h in EPC Roadmap Packet) for BOE document
5. Agency sets the date for kick off meeting with the selected ESCOs & sends email (see item c in Roadmap Packet) to invite the ESCOs
6. Agency selects their selection committee & establishes selection criteria
7. DMME sends email to Treasury, the Agency’s Department of Planning and Budget (DPB) representative, and to the Department of General Services (DGS) informing them that the Agency has begun the EPC process
8. *Kick off meeting with ESCOs*
9. Info is shared, “ground rules” are established (see item d in EPC Roadmap Packet)
10. Due date for ESCO submission of BOE is agreed upon
11. After the meeting, a formal request for the BOE (see item e in Roadmap Packet) is emailed to each ESCO
12. *ESCOs perform independent site surveys of facilities as part of the BOE*
13. *ESCOs submit completed BOE to Agency on agreed upon due date*
14. DMME & Agency review BOE submittals prior to presentations
15. Dates are set for each ESCO to present their findings
16. Oral presentations of BOEs are given by each participating ESCO to selection committee and DMME
17. Agency selection committee makes decision on ESCO(s) to negotiate with
* The State Contract states that the Agency may negotiate with 1 or more ESCOs; if only negotiating with 1, then that determination must be appropriately documented.
1. *Agency and DMME meets with selected ESCO(s) to negotiate*
* Items include overhead and profit rates, Investment Grade Audit(IGA)/TEA audit fee, open book pricing, how contingency will be managed, firm fixed pricing with no change orders, etc.
1. *If Agency and ESCO come to terms, an Memorandum of Understanding (MOU) (see item k in Roadmap Packet) is developed by the ESCO and sent to the Agency for review and signature*
2. *If Agency cannot come to terms with selected ESCO it has the option to begin negotiations with the next ESCO*
3. **MOU/IGA(TEA) Phase (4 to 8 months depending upon scope)**
	1. *MOU is signed by Agency and ESCO begins IGA/TEA*
	2. *DMME sends email to Treasury, Agency DBP rep,& DGS informing them that the Agency has begun the IGA/TEA*
	3. *DMME works with Agency through the IGA/TEA to review the Energy Conservation Measures (ECMs)/Facility Improvement Measures (FIMS) as they are developed to insure they are technically sound and reasonable*

*IGA/TEA is completed with concurrent scope development by Agency ($ down, ECMS, FIMS, etc.)*

* 1. *For state agencies, DPB will review the proposed project if: (i) the total costs to the owner exceeds $3 million and does not exceed $7 million and the energy savings do not offset the total costs to the owner, or (ii) the total costs to the owner exceed $7 million and forward to the Governor’s office for approval. (See* ***EPC funding/approval requirements & process*** *below)*
	2. *For state agencies, proposed project scope sent to the Bureau of Capital Outlay Management (BCOM) to review for code compliance & permitting.*
		+ Approximately $2,000-$5,000
		+ 21 day maximum turnaround
	3. *For state agencies, ESCO corrects any issues BCOM finds in their code/permitting review*

***Agency determines whether or not to move forward to a design build contract (ie, CO9DB) to execute the proposed scope; if so, then proceed with process outlined below; if not, then agency pays ESCO for TEA/IGA and process is concluded.***

* 1. *Documents finalized to include:*
		+ Proposed Contract (ie, CO9DB) and all required attachments
		+ ECM break out
		+ Financial pro forma
	2. *All final documents are sent to DMME and to DPB if the project meets the criteria to be treated as a capital project (See paragraph D above).*
		+ Project must be cash flow neutral or positive each year of the term of the contract

Agency may be able to “buy down” projects that do not fully fund themselves via energy savings with funds from operating budgets.

* 1. *When DMME approves project, DMME sends approval letters to Agency, Treasury, DPB, DGS, BCOM & Governor’s office*
1. **Contract(ie, CO9DB) and Design/Construction Implementation Phase (8 to 18 months depending on scope)**
	1. *Upon OAG approval of the payment and performance bonds for the construction effort & DMME approval letter the Agency signs the contract (ie, CO9DB) with the ESCO. OAG review of the bonds is always required; OAG review of the contract is at the agency’s discretion.*
	2. *Required documents are sent to Treasury (see item n Roadmap Packet)*
	3. *Treasury approves financing and locks in interest rates*
		* ESCO has been monitoring the rates and making necessary changes to insure the project will cash flow as required by code
	4. *After Treasury approves financing,* ***Agency issues a notice to proceed***
	5. *Once ESCO receives notice to proceed, the ESCO produces any engineered drawings, permits, etc.*
	6. *For state agencies, agency Director notifies Director of DPB that the Agency has entered into an EPC over $250,000*
	7. *ESCO begins work with the exception of any ECMS that require further review by BCOM or by the local building official (ie, for any construction which requires a building permit)*
	8. *Agency has BCOM perform a final review of any ECMS that require their review for code compliance, safety & permitting. The cost for the BCOM or local building code review is covered by energy savings*
	9. After receiving a Building Permit from the State Building Official (state agencies) or the applicable local building official(for any construction requiring a building permit),  *ESCO will then begin work on the additional ECMS (item G above)*
	10. *Construction of project*
	11. *DMME will continue to work with Agency during construction if technical assistance is requested*
2. **Measurement & Verification (M&V) Phase (ongoing)**
	1. *The M&V guarantee begins on the first day of the month following substantial completion/owner acceptance*
	2. *Prior to substantial completion of the construction effort, the ESCO provides guaranteed energy savings bond. Bond is purchased yearly on the anniversary of the guarantee for the term of the contract*
	3. *ESCO holds reconciliation meeting each year (Code of VA); agencies/localities are encouraged to use independent, 3rd party measurement and verification, in support of this annual reconciliation.*
		* DMME will attend review
	4. *If shortfall in guarantee is identified, ESCO writes a check covering the difference to the Agency*
		* ESCO makes necessary repairs to correct shortfalls at no cost to Agency -- ESCO pays for the work, not the Agency

**Additional Supporting Information**

From code section § [11-34.3](http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+11-34.3). Energy Performance-Based Contract Procedures; required contract provisions.

*E. The term of any energy performance-based contract shall expire at the end of each fiscal year but may be renewed annually up to 20 years, subject to the contracting entity making sufficient annual appropriations based upon continued realized cost savings. Such contracts shall stipulate that the agreement does not constitute a debt, liability, or obligation of the contracting entity, or a pledge of the faith and credit of the contracting entity. Such contract may also provide capital contributions for the purchase and installation of energy conservation and facility and technology infrastructure upgrades and modernization measures that cannot be totally funded by the energy and operational savings.*

Depending on the amount of the contract and whether or not it is fully funded by energy savings will determine the process to follow for proper approvals. Part of this process is detailed in **EPC funding/approval requirements & process** below. Other required approvals are described in the EPC Timeline above and in the Summary of project costs and compensation to be paid by the contractor, which is an item in the following list of EPC Roadmap Packet contents.

**EPC Roadmap Packet contents**

* 1. Developed process flow with checklist
	2. List of approved ESCOs with contact info
	3. Generic email for inviting ESCOs to BOE
	4. Generic BOE agenda
	5. Request for the BOE form
	6. Generic scoring matrix
	7. Evaluation Criteria to Consider & Possible follow up questions for negotiations with 1 or more ESCOs
	8. Facility information for the Back of the Envelope Audit document
	9. DGS EPC contract & instructions
	10. Energy special terms and conditions
	11. IGA/TEA MOU & Instructions
	12. CO9-DB Design Build Contract
	13. CO7-DB General Conditions for DB Contract
	14. Treasury forms
	15. Template for email to notify DPB of EPC
	16. Summary of project costs and compensation to be paid by contractor

**EPC funding/approval requirements & process**

u. Energy-efficiency Projects: Improvements to state-owned properties for the purpose of energy-efficiency shall be treated as follows: (from <http://lis.virginia.gov/142/bud/budsum/HB5002enr.pdf> page 469)

**Projects <$ 3 million, projects > $3 million but < $7 million and ARE FULLY FUNDED BY ENERGY SAVINGS:**

1. Such improvements shall be considered an operating expense, provided that:

a) The scope of the project meets or exceeds the applicable energy-efficiency standards set forth in the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE), the Illuminating Engineering Society (IES) standard 38 90.1-1989 and is limited to measures listed in guidelines issued by the Department of General Services;

b) the project is financed consistent with the provisions of § 2.2-2417, Code of Virginia, which requires Treasury Board approval and is executed through a nonprofessional services contract with a vendor approved by the Department of General Services;

c) The scope of work has been reviewed and recommended by the Department of Mines, Minerals and Energy;

d) **The total cost does not exceed $3,000,000; and**

**e) If the total cost exceeds $3,000,000, but does not exceed $7,000,000, the energy savings from the project offset the total cost of the project, including debt service and interest payments**.

**Projects >$7 million, projects > $3 million but < $7 million and ARE NOT fully funded by energy savings:**

1. If (a) the total cost of the improvement exceeds $7,000,000 or (b) the total cost exceeds $3,000,000, but does

not exceed $7,000,000, and the **energy savings from the project do not fully offset the total cost of the project**, including debt services and interest payments, the improvement shall be considered a capital expense regardless of the type of improvement and the following conditions must be met:

a) The scope of the project meets or exceeds the applicable energy-efficiency standards set forth in the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE), the Illuminating Engineering Society (IES) standard 90.1-1989 and is limited to measures listed in guidelines issued by the Department of General Services;469

b) the project is financed consistent with the provisions of § 2.2-2417, Code of Virginia, which requires Treasury Board approval and is executed through a nonprofessional services contract with a vendor approved by the Department of General Services;

c) The scope of work has been reviewed and recommended by the Department of Mines, Minerals and Energy;

d) The project has been reviewed by the Department of Planning and Budget; and

e) The project has been approved by the Governor.

**All projects over $250,000 regardless of approval process must inform DPB**

1. If the total project exceeds $250,000, the **Agency Director** will submit written notification to the Director, Department of Planning and Budget, verifying that the project meets all of the conditions in subparagraph 1 above. (Template for notification included in EPC Roadmap)