Disclaimer:
The State Energy Office of North Carolina would like to thank the National Energy Services Coalition for allowing the use of this resource for USI participants. A great deal of work went into compiling this information into a single location. As you go through this program and/or have additional questions, please contact Reid Conway reid.conway@ncdenr.gov.

GESPC-U Lesson #125:

Post Construction Performance Period

FYI: Terms and Acronyms can be found on the last page

Summary: We take one final look into the post-construction activities required to achieve and illustrate project savings. What is required to maintain and effectively operate facilities post construction and other tips are shared as we close out the introductory course of study into GESPC.

We wrap up our "undergraduate series" with a few thoughts regarding the post construction performance period.

Throughout this course we have repeatedly pointed out the importance of following a well-vetted standardized template contract documents from SEO that can be found on the SEO website. These documents ensure that all parties are well informed of the mutual expectations for the performance contracting process and project. This continues to hold true as we look at the post-construction activities required to achieve and to illustrate project savings.

As measures were implemented for the project, there should have been absolute clarity about who and when operational and maintenance responsibilities were either maintained by or transferred from the ESCO to the Owner. For most conventional GESPC projects,

public owners expect to be fully trained and informed on what is required to maintain and effectively operate the project measures so as to continue to achieve savings. This means that as a part of the Investment Grade Audit and implementation contract, schedules should have been prepared that delineate who will be doing what and when. This may mean the Owner has a schedule of operational and maintenance activities they have agreed to take on, while the ESCO may have the responsibility of reviewing the site, ongoing documentation and checklists of the completion of those operational and prescribed maintenance activities. If maintenance and upkeep lapse, even with more efficient devices and systems, it is just a matter of time before savings the project set out to achieve are sacrificed.

This is just one of the many reasons why states look to the annual measurement and verification report to inform project owners and supervising authorities about ongoing activities, reviews, site visits and monitoring and measuring that result in a validation of guaranteed savings achieved. Owners are typically bound by their contractual agreement to perform maintenance and operational responsibilities as well as timely reporting to the ESCO the kinds of changes that all dynamic facilities will incur. This may include changes in when facilities and systems are being used, the number of folks in the facilities, the addition or removal of utility consuming devices and any other action or event that has a material impact on energy and water use.

And the ESCOs have quite a bit at stake in these projects, far more than traditional construction or renovation work. They've agreed to guarantee that if all parties do what they committed to in the Implementation Contact, they'll analyze the use, review the operation

and maintenance activities, confirm that all is in order, adjust the anticipated changes in utility consumption impacted by weather and any changes made by the owner and their staff and measure the ongoing savings to illustrate savings have and continue to be achieved. And this is not always such an easy task. Reviewing building or energy management system settings and trends, reading light levels, power draws, flue gas composition, flows and temperatures are all a part of discerning if the devices and systems and the owner, are fulfilling their commitments to stewardship.

And as the partnership continues, this work should always be fulfilled with active witnessing and documentation so that the Owner and ESCO together can be assured that the work performed, the report provided, the savings are all occurring just as was envisioned, planned, implemented and guaranteed.

In these projects lasting 10, 15, or 20 years, maintaining the discipline of the partnership is key to the persistence of achieved savings. Will things change in that time? Well of course they will. People will change, some devices will wear out and need to be replaced, schedules will need to shift, things will be added and things will be removed. Some winters will be colder and some summers hotter. Still projects built on a foundation of science and mutual commitment to succeed will result in annual routine and non-routine adjustments allowing every year's M&V report to build upon the history of the past, accommodate the changes for the current performance year and illustrate that savings can and do persist.

Empowered by the forethought and planning that is required to extend a project performance and savings guarantee, and built upon the

partnering of transparent information exchange and commitment, the very success of the billions and billions of dollars of work that's been completed using performance contracting proves performance contracting delivers.

And, using tried and true documents that guide success and a little experienced and knowledgeable oversight, these projects do deliver – they deliver on performance, they deliver on savings, they deliver on reducing deferred maintenance, they deliver work fulfilled fundamentally using money that was budgeted to pay utility bills. They deliver on reducing greenhouse gases and creating jobs in their local economies.

We started this course of study with the observation that what most likely keeps folks from using performance contracting to modernize their aging and failing infrastructure is a lack of trust and confidence in the process. We hope that these lessons have helped grow trust and confidence of the model and the steps, process and rigor that result in continued project success.

We also want to convey on you the title of graduate and alum of GESPC-U – the University of all things Guaranteed Energy Savings Performance Contracting. By completing the last quiz below, it will have certainly been earned.

Once you feel comfortable with the information above, please scroll down and complete the quiz below. Email your answers to Reid Conway at reid.conway@ncdenr.gov. If you have additional questions, feel free to include them as well.

Lesson 24 Quiz

1. List some of the work that may be a part of post construction activities for a GESPC project.

2. What attributes can help make every GESPC project successful?

3. Briefly describe how GESPC projects impact on efficiency, environment, and the economy.

4. How do commissioning and measurement and verification differ?

Terms and Acronyms

3rd Party	3rd Party Engineer
COS	Council of State
DOA	NC Department of Administration
DPI	NC Department of Public Instruction
ECM	Energy Conservation Measure
ESA	Energy Services Agreement
ESC	Energy Services Coalition
ESCO	Energy Service Company could be interchangeable with QP
ESPC	Energy Saving Performance Contracting
GEPC	Guaranteed Energy Performance Contracting
GESPC	Guaranteed Energy Saving Performance Contracting
GS	General Statute
GU	Governmental Unit
IGA	Investment Grade Audit
IPMVP	International Performance Measurement and Verification Protocol
LGC	Local Government Commission (Housed in the Treasurer's Office)
LGU	Local Governmental Unit
M and V	Measurement and Verification
OR	Owner's Representative
OSBM	NC Office of State Budget and Management
PC	Performance Contracting
Pre-Bid	Meeting held prior to the bid opening
QP	Qualified Provider could be interchangeable with ESCO
QR	Qualified Reviewer
RFP	Request for Proposal
SEO	State Energy Office
UNC	Refers to the UNC System
USI	Utility Savings Initiative