



National Sports Centre

ENERGY SAVINGS INITIATIVE (ESI) RESPONSE 2018



CONFIDENTIAL Information for the Submission of
ENERGY CONSUMPTION REDUCTION



2 Cherry Hill Park / Paget / PG03 / Bermuda
web: www.atlanticenergysg.com
email: info@atlanticenergysg.com
phone: 441 591 -7173

The following information is central to our strategic advantage and operational effectiveness in the energy market in Bermuda. As such, AESG requires that the approach taken by the Company remain confidential. Recipient and its Representatives shall not disclose any of the Confidential Information in any manner whatsoever, except as required to fully evaluate our proposal, and shall hold and maintain the Confidential Information in strictest confidence. Recipient hereby agrees to indemnify Owner against any and all losses, damages, claims, expenses, and attorneys' fees incurred or suffered by Owner as a result of the release of this information to unauthorised personnel by Recipient or its Representatives.

Table of Contents

	page
1. Proposal Summary.....	4
a. Approach to successfully fulfil mandate.....	5
b. Proposed Team Structure, roles, responsibilities & areas of specialisation.....	8
2. Team Knowledge, skills and experience.....	10
a. Qualifications of Group.....	10
b. Qualifications of individual team members.....	21
3. Timeline for the delivery of the project	24
a. Proposed project schedule.....	24
b. AESG Group ability to meet delivery timeline.....	25
4. Financial Information	26
a. Financial spending in the ESI market over recent years.....	26
b. Cost/benefit analysis.....	27
c. Pros/Cons operating and maintaining ESI Solution.....	29
d. Overview of financial arrangements.....	30
e. Anticipated annual financial commitment to ESI Project.....	31
f. Clear description of ESI ownership.....	31
g. Overview of ESI maintenance.....	31

Background

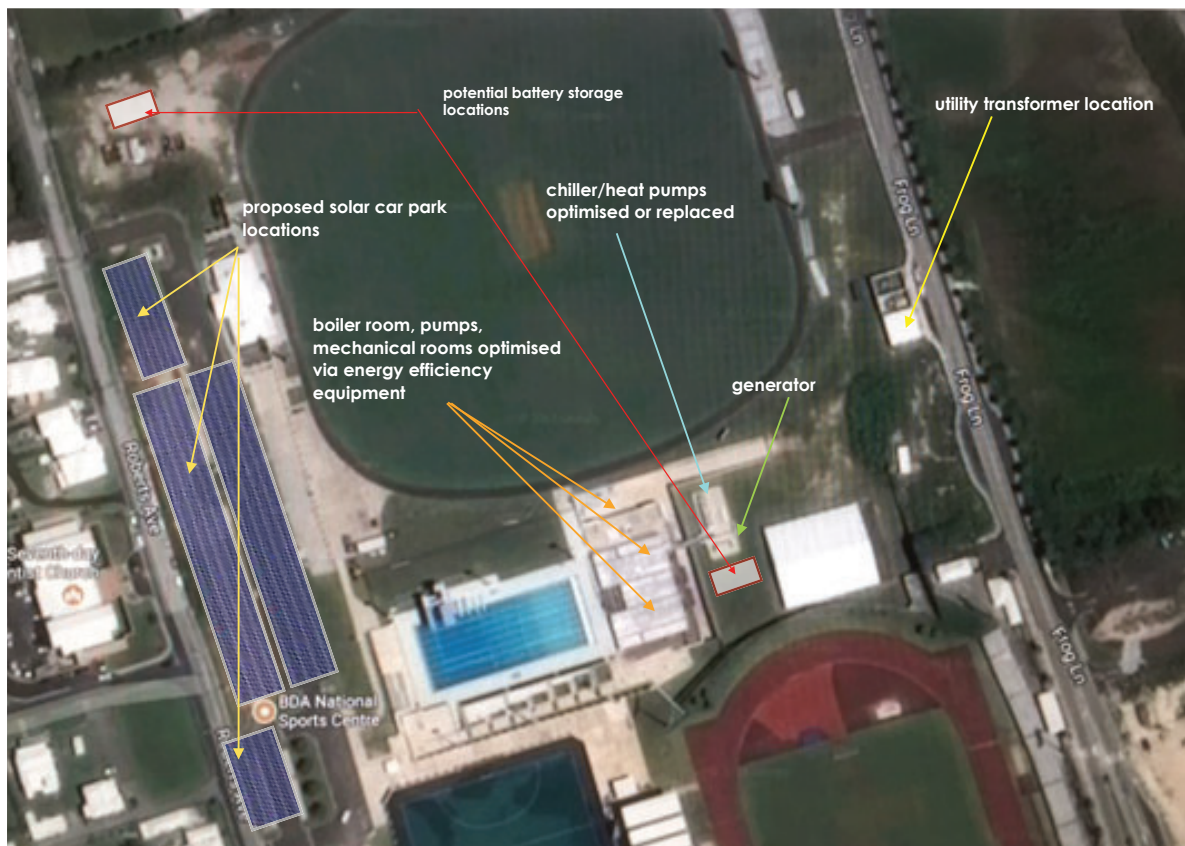
The Board of Trustees of the Bermuda National Sports Centre is looking for ways to reduce the cost of operating the National Sports Centre and to this end is seeking to partner with experienced and reputable firms who specialise in energy reduction technologies and systems. The overall intent is to reduce the carbon foot print of the facility by introducing energy saving technologies which will result in reduced electrical energy consumption.

Bermuda experiences energy rates which are amongst the highest energy rates globally. Newer renewable technologies such as; solar PV, wind, tidal and wave electricity generation are currently available in Bermuda, but they are not currently a part of the NSC energy supply mix. This proposal provides an approach that will enable the implementation of some of the technologies previously mentioned and address the Energy Savings Initiative sought by the NSC.

Our proposal aims to:

1. Reduce the Bermuda National Sports Centre's (NSC) energy consumption by 15-20% resulting in freed up funds that can be redeployed across the facility.
2. Enable the NSC to demonstrate that it is a leading example as it relates to energy efficiency, conservation, and environmental stewardship.
3. Finance the project using the NSC's own savings via a "lease-to-own" model.

Bird's-eye view of proposed concept



Approach to successfully fulfil mandate

AESG and its partners will build, own, operate and transfer (BOOT) a complete energy solution that will significantly reduce energy consumption and related costs at your facility. Unlike other solutions, which may only address lighting or HVAC, or simply substitute utility supply with the renewable technologies, our solution will address the total energy demand at the facility and enable the NSC to maximise its savings. We will implement a three-pronged approach that includes energy efficiency, demand-side management, and micro-grid technologies. The reduced demand requires a smaller solution footprint and a cheaper project cost.

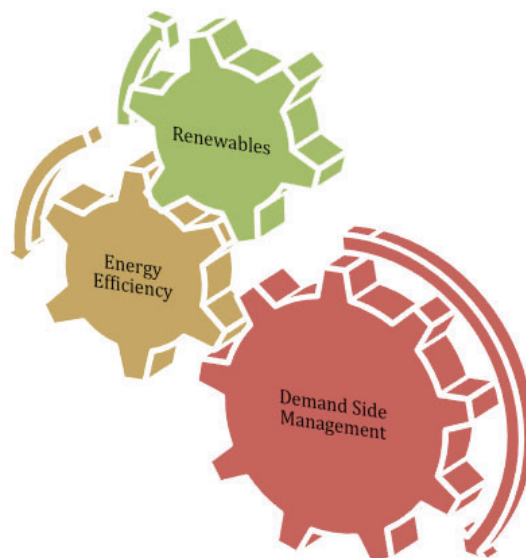
In recognition of the financial constraints on the NSC, AESG has built our solution around a "lease-to-own" model. We have developed a relationship with investors who are willing to finance the entire project.

The solution costs will be repaid through a finite lease agreement (Energy Service Agreement – ESA) that will ensure the monthly payment amount is less than your current average monthly bill. This will guarantee your average annual energy costs are reduced and a positive **"net cash"** position after the first month interconnection has been established.

The Bermuda National Sport Centres' solution will be managed through the following phases:

Phase 1 – Energy Assessment (Audit)

The AESG strategy utilises energy audits and/or energy monitoring of large commercial entities to facilitate a three-pronged approach to lowering overall energy cost. Energy audits enable AESG to design customised guaranteed energy saving solutions for their clients that treat several different electrical loads in the facility (i.e. Lighting, HVAC, Refrigeration, etc.). The treatments start by focusing on energy waste inherent in building construction and equipment design. Energy monitoring allows our clients to better manage their energy usage. If required or applicable, we then investigate demand-side management and/or renewable generation opportunities for further savings and energy independence.



Phase 2 – Energy Reduction Solution Design (EE & DSM)

ENERGY EFFICIENCY - There is approximately 10% energy waste in the typical building.

AESG is an authorised affiliate of Energy Information Systems, Inc. (EIS) and hold exclusive rights to all its products and services on the island. AESG uses EIS to deploy the energy efficiency part of its overall three-prong approach.

AESG first performs an extensive and detailed site energy consumer inventory, which enables EIS's engineering and technical services department to design, model, and engineer a unique energy savings system. This automatic, passive, "Total System Approach" consists of a variety of proprietary and patented technology, custom designed/engineered specifically for the intended facility to fully provide maximum energy savings. AESG will produce a complete inventory report of all electrical loads and a breakdown of the usage and cost to operate major categories of load.

Once we have evaluated the entire system, we will then strategically target high consumers such as the heat pumps, flood lights, and air conditioning (we can see water heating for general use is currently being addressed).

DEMAND SIDE MANAGEMENT - You can't improve what you don't measure!

BELCO provides you with a monthly bill that states how much you have used in kWh and kW demand to calculate how much you owe them as part of their revenue collection process. This is great for BELCO but it does little to help you save money on your electricity bill.

Metering & Control technologies solve this problem and provide a whole lot more. We provide real-time information on your usage including; month-to-date kWh, real-time demand, and the associated cost so that you know what you have spent to date and can forecast what you will spend for the billing period. This knowledge gives you the opportunity to make informed decisions about how you will operate the facility prior to receiving your next bill.

In addition, we will install multiple public displays that provide real-time energy consumption which will enables facility managers to highlight awareness needed to influence staff and guests' energy related behaviours. You will also be able to eliminate operational realities like "out of hours" consumption and/or unusual consumption behaviours currently invisible to facility personnel. Just knowing what is consuming and when can quickly eliminate waste and lower energy consumption in the facility.

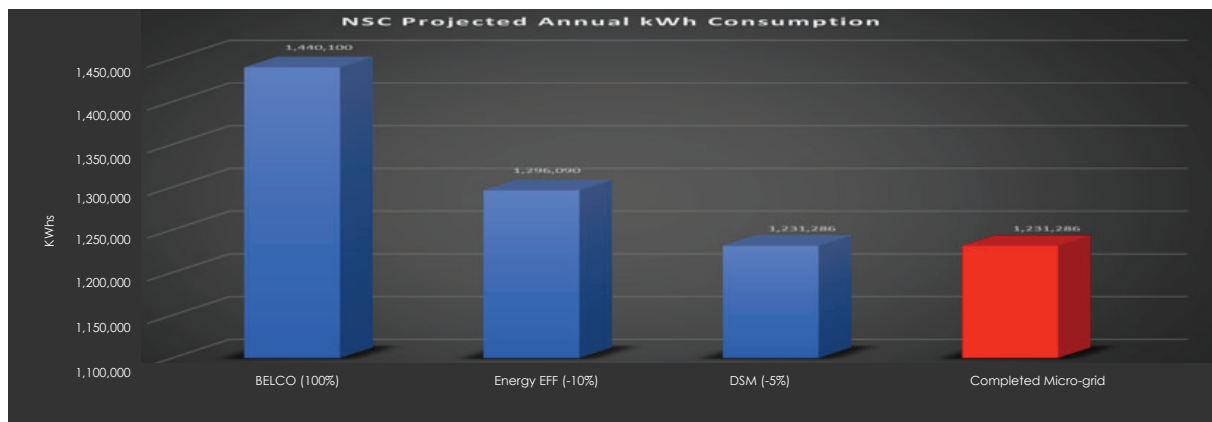
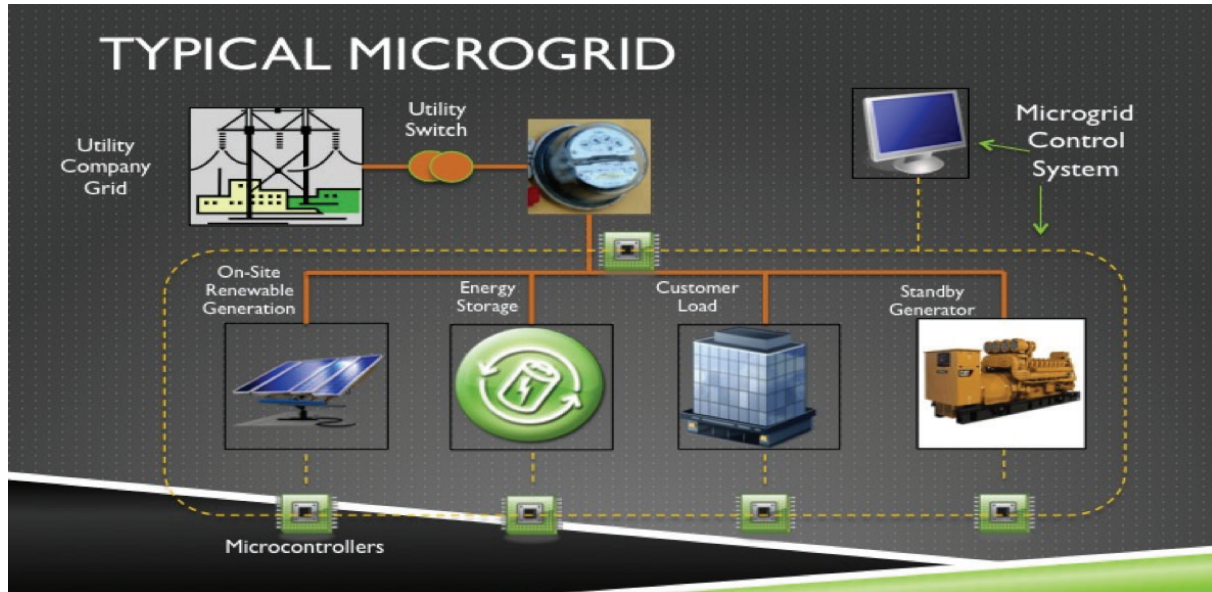
Phase 3 – Micro-grid Design (Renewables & Batteries)

"Micro-grids integrate multiple types of energy generation resources, storage systems, and efficiency programs, allowing for optimal utilisation of renewable energy resources and facilitating advanced energy management, demand response, and load reduction solutions."

RENEWABLE SOURCES - Energy independence is the way of the future.....

Renewable sources such as solar PV and wind are quickly penetrating the Bermuda market. These technologies have been tested and proven for decades but are now more affordable than ever.

AESG will use the energy audit data to design the most effective renewable solution and/or micro-grid for the NSC. The reductions achieved through the combination of demand side management and energy efficiency, result in a smaller “carbon footprint” for NSC and a reduced solution size and cost.

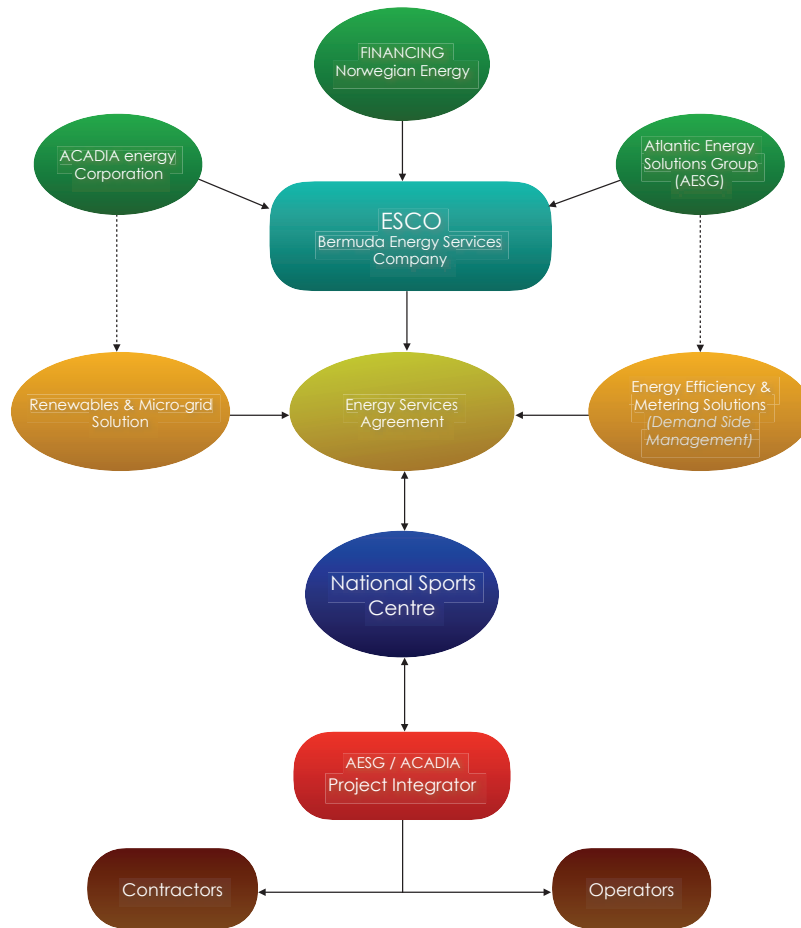


Phase 4 – Project Financing (Energy Service Agreement)

The final energy solution technology suite will be paid for through a “lease-to-own” model and financed with the funds currently received by the utility in the form of a monthly bill. An Energy Service Agreement (ESA) will be used to govern the equipment lease. The ESA will clearly specify all the terms and conditions related to our “lease-to-own” agreement including; lease term, equipment access, payment arrangement, equipment operation and care.

The monthly lease amount will be calculated to provide an immediate cash savings of up to 20% of your current BELCO bill and will be allocated to the complete payment of the system at the end of the lease term. Please note: BELCO planned upgrades are anticipated to have up to a 3% increase over the next 3-5 years, and at the very least will include a financial obligation on the utility potentially up to the next 20.

Proposed Team Structure Flowchart



Team Members, Roles, Responsibilities and Areas of Specialisation

Norwegian Energy Solutions and Services (NESS)

Norwegian Energy Solutions and Services is the **Financing** partner in the proposed Special Purpose Entity (SPE), (*Bermuda Energy Services Company*), providing sponsor equity for the proposed project. NESS offers intelligent strategies and full financing services for the development, construction, and management of an energy production smart grid infrastructure. The company takes a holistic partnership approach to ensure they provide optimal structured finance solutions for each project. NESS has offices in Oslo, Norway and Ellicott City, MD.

Acadia Energy

Acadia Energy Corporation is the **Project Integrator** and provider of the **renewables and micro-grid components** of the project. Located in Rochester, New York, Acadia coordinates all phases of the project from initial concept and funding to long term maintenance, operations and security. Its entrepreneurial instincts enable it to provide flexible and cost-effective solutions for renewable energy projects ranging from advanced micro-grids to world-class solar farms.

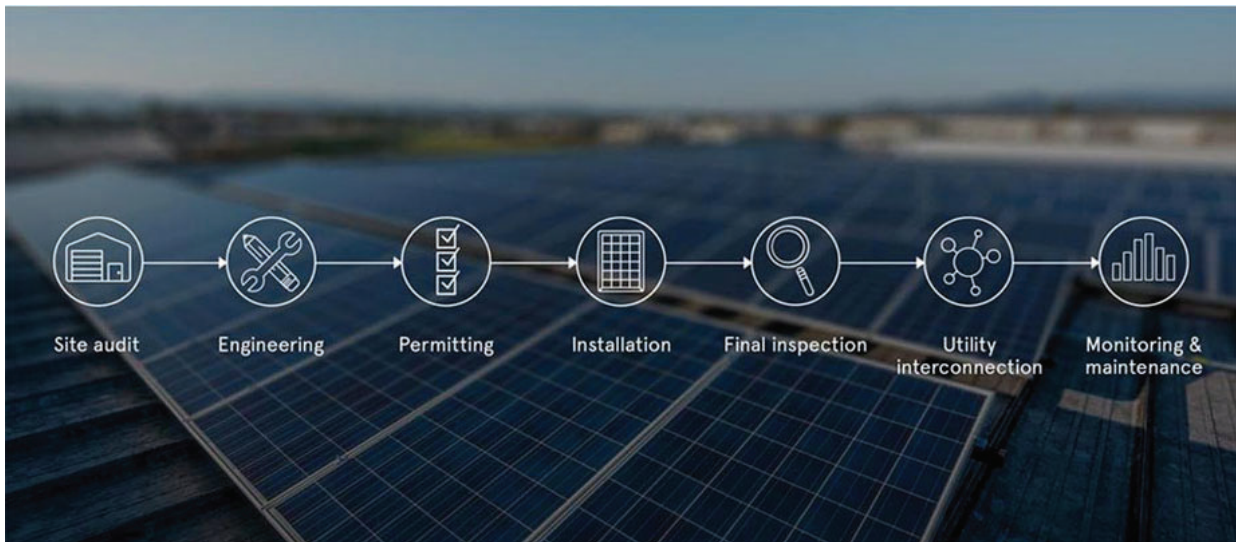
Acadia's thorough understanding of government, energy and integration has enabled it to assemble a team of global partners that will provide the various product components, engineering and installation along with local contractors. These partners offer outstanding service and product capabilities uniquely positioned in the industry. The core partners are:

- **Eltek (A Delta Group Company)** – Inverters, power components and credit support
- **Norwegian Sovereign Wealth Fund via the Norwegian Export Credit Guarantee Agency ("GIEK")** – Project finance
- **NESS, Inc** – Project finance strategy / structure
- **Triad Consulting Engineers, Inc** – MEP engineering and design
- **REC Solar** – Solar modules and components

Atlantic Energy Solutions Group Ltd (AESG)

AESG is the local **Project Integrator** and provider of all **energy efficiency, metering and energy audit** analysis. AESG coordinates all phases of the project from accumulation of the energy audit data used to design the total solution, local permits, compliance elements, shipping and transport logistics from consolidated port in New York onsite in bermuda. Assembly and project management of local and overseas partners and contractors. AESG's core partners and contractors are:

- **Energy Integrated Solutions** – energy efficiency technology and energy audit analysis
- **British Energy Saving Technology** – eniscope real time metering technology
- **PENG Electric** – local electrical works contractor
- **Universal Electric** – Transformer interconnection



Acadia

The executive and project management team at Acadia, along with our key partners in the projects detailed in this proposal, have extensive development experience in designing, developing, constructing and operating utility-scale solar projects, as well as advanced micro-grids, rooftop solar, and other distributed generation resources. As a true integrator and Special Purpose Entity (SPE), Acadia coordinates all phases of a project from initial concept and funding to long term maintenance, operations and security. Its entrepreneurial instincts enable it to provide flexible and cost-effective solutions for renewable energy projects ranging from advanced micro-grids to world-class solar farms.

Our team's projects consistently meet or exceed the expectations of our clients, and we are proud of our ability to work with clients to develop projects that are tailored to their specific needs. We take pride in staying on schedule, delivering quality components and services on time, while staying within budget. Acadia is currently a NYPA Value Contract partner in the design, development and operations of micro-grids under the Q17-6169MH solicitation.

Atlantic Energy Solutions Group Ltd (AESG)

AESG co-founders first collaborated back in the mid 90's to complete refurbishment of the former US Navy Base electrical grid when it was turned over to the Bermuda Government. As manager of the excavation company responsible for creating all trenching, telecom & utility conduit installation, backfill and concrete pads for all transformers throughout the multi acre site, Mr. Minors liaised with Mr. Wade, who was the BELCO Project Electrical Engineer responsible for the implementation of the new electric grid infrastructure for the Southside property.

After years of acquiring accreditations in law, electrical engineering, construction and business, AESG co-founders fused talents and experience in 2010 and incorporated the limited liability company Atlantic Energy Solutions Group Ltd. in 2011 to help clients save money on energy costs, by creating energy solutions that integrate energy efficiency, demand-side management and renewable energy products. Through strategic partnerships and synergistic relationships, AESG has become bermuda's exclusive provider of all Energy Integrated Solutions (EIS) industrial energy efficiency and energy audit technology, used globally by companies such as Johnson Controls, British Petroleum (BP), Verizon, Pepsi and Walmart. AESG also provide savings guarantees backed by Lloyds of London, and has further evolved into a project manager and/or integrator of additional energy solutions including, LNG Power Generation, Waste-to-Energy Power Generation, Micro-grid Construction and Optimisation, Transmission & Distribution Asset Upgrade and Optimisation.

Triad Consulting Engineers, Inc

Triad Consulting Engineers, Inc. (TCEI) is a full-service MEP engineering and design-build firm with extensive engineering and general construction experience in power plants, CHP facilities, data centres, petrochemical, solar farms, commercial, industrial and resort facilities. TCEI is an ISO 9001 U.L. DQS Certified firm.

In addition to the above, TCEI provides power system studies including short circuit, coordination and arc flash, testing and inspection services. Our firm brings over 40 years of engineering and construction management experience to our clients. TCEI, through a wholly owned subsidiary, has been in business for over 70 years, manufacturing U.L. Listed, IBEW electrical switchgear and other

electrical equipment from 208V through 38kV. Triad's overseas subsidiaries in the Bahamas and Dominican Republic provide consulting and construction services for the Caribbean.

Core Competencies

- Distributed Generation Design/Engineering for Prime Generation, Solar, CHP and Biomass.
- MEP Consulting Engineering
- New Construction, Repair & Renovation
- Switchgear, Generation and UPS Systems
- Photovoltaic Systems
- Design-Build Services for All Disciplines
- Consulting Engineering for Due Diligence Services
- Project Management
- Construction Inspection Services
- Electrical Testing and Inspection Services

We have summarised the Team's relevant development history below and have included several key projects on the following pages.

Project Name	Location	Type	Aggregate Size
Pemberton Solar Farm	NJ	Ground Mount	38 MW
Tinton Falls Solar Farm	NJ	Ground Mount	16.9 MW
Hamilton Solar Farm	NJ	Ground Mount	10 MW
100 Dorigo LLC	NJ	Rooftop	926 kW
36 Butler LLC	NJ	Rooftop	694 kW
25 Pier Lane LLC	NJ	Rooftop	112 kW
625 Gotham LLC	NJ	Rooftop	86 kW
240 Main LLC	NJ	Rooftop	50 kW
69 Wesley LLC	NJ	Rooftop	50 kW
100 Dorigo Lane LLC	NJ	Rooftop	50 kW
501 Broad Street LLC	NJ	Rooftop	50 kW
Stokes Point	Bermuda	Ground Mount	10 KW
Resort World Bimini	Bahamas	Energy Audit	23,000 Kwh / per day
The Argus Group	Bermuda	Energy Efficiency	6,000 Kwh / per day
Bermuda College	Bermuda	DSM & Energy Monitoring	7,500 Kwh / per day
Cedarbridge Academy	Bermuda	Energy Monitoring / Transmission & Distribution	6,000 Kwh / per day
TOTAL			67 MW



Project Name:	Tinton Falls Solar Farm	Location:	Tinton Falls, New Jersey
Project Size:	20 MW	Project Type:	Ground Mount
Date Completed:	2012		
Description:			
The Tinton Falls Solar Farm is a 20 MW ground-mounted solar development utilizing approximately 85,000 panels. The project was built on the 100-acre field along Shafto Road and Tormee Drive in Tinton Falls, NJ.			



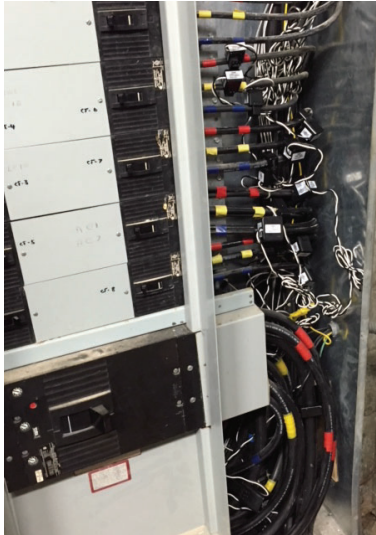
Project Name:	The Argus Group	Location:	Hamilton, Bermuda
Project Size:	\$70,000 per month Bill	Project Type:	Energy Efficiency
Date Completed:	2012		

Description:

12 Wesley Street is a 7-floor office building where a suite of energy efficiency technologies was implemented. Our detailed audit process enabled us to target specific loads and guarantee minimum savings for the Client. We prescribed LED lighting retrofits, timers and sensors, and power factor correction technologies. The combined energy savings solutions provided a guaranteed 11.34% minimum savings and a 33.33% ROI. The Client received over 20% in actual savings and significantly reduced their payback period on their investment.



Project Name:	Monroe County Civic Centre	Location:	Rochester, New York
Project Size:	85 KW	Project Type:	Rooftop
Date Completed:	2014		
Description:			
This project's internal and external components are carefully designed and laid out for optimum impact not only from an electrical compliance prospective but from aesthetic and while also considering floor space.			



Project Name:	Bermuda College	Location:	Paget, Bermuda
Project Size:	\$80,000 per month Bill	Project Type:	Demand Side Management ongoing Energy Monitoring
Date Completion :	2015		

Description:

Installation of 92 metering points at the Bermuda College. The system is designed to capture real-time monitoring of the network's energy parameters including; kilowatts, voltage, and current. Real-time access to this type of data enables the College to monitor their daily consumption, extend the life of critical equipment, and eliminate waste. However; the College's main driver for installing the system was to be able to bill their tenants to utility scale standards. They were able to recover an additional \$15k per month in charges from their tenants. Most recently in 2018 energy monitoring enabled AESG to identify consistently high voltage readings throughout the College facility. Stepping down transformers in key areas has led to further reductions averaging over \$2000 per month



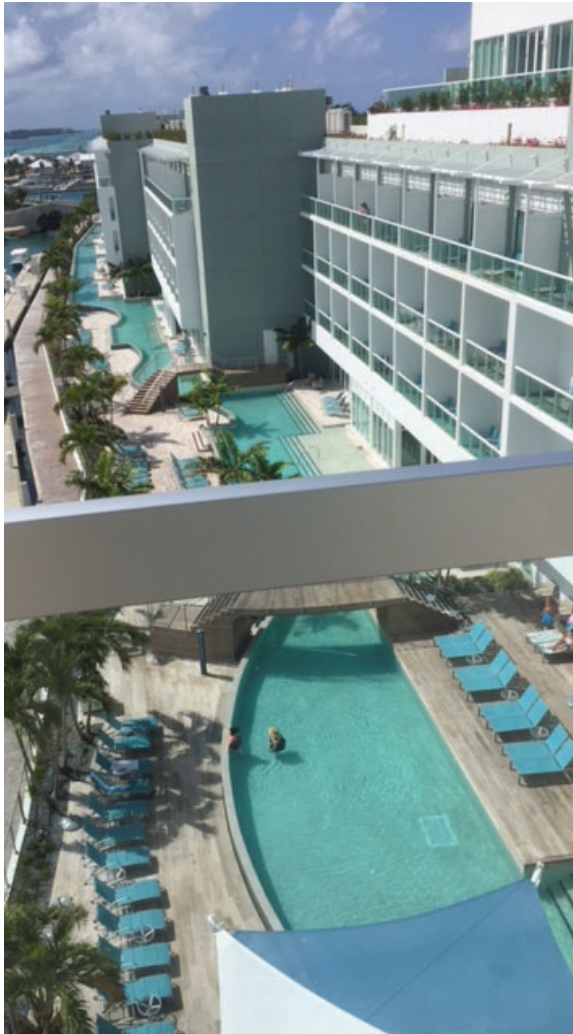
Project Name:	Solar Farm Vandel	Location:	Vandel, Denmark
Project Size:	125 MW	Project Type:	Ground Mount
Date Completed:	2016		
Description:			
This large scale solar farm in Denmark produces approximately 71,700 MWh of clean electricity per year, enough electricity to power 21,500 Danish households and the equivalent to an annual reduction in carbon dioxide emissions of approximately 30,940 tonnes.			



Project Name:	Ako Energy Park	Location:	Hyogo, Japan
Project Size:	4.6 MW	Project Type:	Ground Mount
Date Completed:	2016		

Description:

This power plant is located in a mountainous area of Ako City in Hyogo, Japan. The new plant is equipped with a capacity of 4.6MW and takes up an area of 24 acres. The project features a distributed power generation system that ranks it the largest distributed solar plant in Japan, generating approx. 4,900 MWh of electricity per year.



Project Name:	Resort World Bimini	Location:	Bimini, Bahamas
Project Size:	\$200,000 per month Bill	Project Type:	Energy Audit
Date Completion :	2016		

Description:

AESG carried out an energy audit at the recently opened Resorts World Bimini Bahamas. The Resort is a 345,000 sq. ft., 300 room hotel and casino in Bimini, Bahamas. Our detailed audit process identified several savings opportunities by utilizing new technologies and operational best practices. The solutions ranged from timers and sensors to wind and solar renewable technologies. The combined energy savings solutions guaranteed a minimum of 10% savings on energy consumption and forecasted payback period of 45 months



Project Name:	Stokes Point	Location:	St. George, Bermuda
Project Size:	10 KW	Project Type:	Ground Mount
Date Completion :	2017		

Description:

AESG designed, installed, monitors and maintains a 10kW solar PV system with one of our local strategic partners. The system is a ground-mounted application and includes battery storage and real-time performance monitoring. An energy audit was conducted and various energy efficiency technologies were deployed to maximize energy savings and to ensure minimum equipment footprint. Client currently enjoys a 30% reduction from original bill.



Project Name:	Westmont Solar Energy Project	Location:	Los Angeles, California
Project Size:	13 MW	Project Type:	Rooftop
Date Completed:	2017		

Description:

Considered one of the largest and most productive rooftop solar installations in the world, this project includes more than 50,000 solar panels covering 50 acres of roof space. It ranks second in size only to the solar project at Apple Inc.'s headquarters in Cupertino, but its electricity output makes it the world's most powerful.

John Bay *President*

John Bay has spent over 30 years in Information Technology and business management environments for industries including systems integration, wireless data, energy, telecommunications, application software and internet technology development, and application service provider markets. Previously he founded Paradigm4, a corporate enterprise with more than 200 employees, leading to the successful completion of some of the largest mission-critical system integration projects in the US. He has held upper management positions throughout his career, including P&L divisional responsibilities for wireless and telecommunications at MCI WorldCom.

Mission Critical Projects

- Florida Department of Law Enforcement
- Kansas Bureau of Investigation
- New Mexico State Police Dept
- Delaware State Police Department
- Tennessee Bureau of Investigation
- Wisconsin State Police Department
- NJ Office of the Courts – Nation's first statewide wireless ticketing application
- AT&T Wireless – pioneered "data roaming" system
- FBI – Agent Tracking System NYC
- FDNY – Command & Control Center
- NYPD – Command & Control Center
- NYC Sheriff's Department
- NYS DOT – Nation's first wireless data application
- Washington DC – Law Enforcement Switching

Jason Rappaport *Chief Information Officer*

Jason Rappaport has over 20 years of experience bringing enterprise-grade solutions to market with over nine years specifically within the energy market and related technologies. Jason was the architect for a proprietary solar (PV) management solution to handle energy deployment and dispatch within NJ solar farms.

He has held impressive roles enhancing demand response and ancillary services platforms throughout the years, handling over 250MW fleet load within the NYISO and PJM control areas. He was charged with managing real-time load controller integrations for Alcoa aluminium smelters with curtailment of over 55MW per site and driving over \$4M revenue in NYISO DSASP. This project aggregated load across three distinct aluminium smelter lines across two sites, managing variable load requests to comply with NYISO operating requirements to support five-minute total and six second individual target loads. Jason was also managed market participation for Hitachi 1MW Li-ion battery in PJM's Jetstream SCADA integration program to supply regulation at New Jersey site. As an experienced entrepreneur himself, he founded iMobile, bringing advanced PC technology for automotive and aftermarket telemetry and infotainment. Cultivated channel licensing deals with global brands such as Ford, Toyota, Audiovox, Kenwood, JVC resulting in over 52MM in hardware sales. He has consulted over the years with MasterCard, Humana, Bankers Financial Group and major US Healthcare companies to successfully driving new customer engagement channels and restructure data management for enhanced business intelligence. He is a true resource for building valuable intellectual property portfolios and designing custom hardware solutions.

Stuart Brown Sr. Vice President, Acadia Fund/Business Development & Strategic Partnerships

Stuart Brown is a 34 year veteran of commercial, industrial, non-profit and municipal finance with an emphasis on Energy Reduction and Renewable Energy projects. As founder of Capital Innovations, Inc., he has worked hand-in-hand with project originators and their clients in order to fund projects; while using his touch for developing lasting strategic relationships. Stuart's expertise encompasses structuring financial transactions, marketing, sales training and using funding tools as a way to bind together sellers and end-users. His ability to build and energise strategic relationships while using his deep background in marketing and finance helps to creatively enhance go-to-market strategies in a team environment Stuart has served as the President of the Philadelphia Stroke Council (now the National Stroke Association), done volunteer work for the FSH Society and has coached way too many youth basketball and soccer teams. He has the notoriety of losing in 4 consecutive soccer youth championships; something he proudly claims he and Marv Levy have in common.

Tom Welch Director of Cybersecurity and Compliance

A subject matter expert in converged security solutions and privacy controls. Currently serves as CEO of Bullzi Security, Inc., a full service security firm, with subsidiary's specialising in information security and privacy, physical security, investigations, computer forensics and security education. Acting as a consultant since 1988 with an emphasis on physical and logical security countermeasures with direct responsibility for security management, planning, and implementation. Tom's primary security and compliance roles include:

- Plant Walk-downs – BES Asset Listing & BCS Categorisation Methodology
- Cyber Vulnerability Assessments
- Plans, Policies & Procedures
- Physical and Cyber Security Control Planning, Design and Implementation
- Incident Response & Recovery Planning
- Mock Audits
- PV Mitigation Planning and Mitigation Support

Prior to his career in the security industry, served as a Crime Analyst for the City of Orange, New Jersey and a Public Safety Officer (cross-trained Police Officer and Firefighter) for the City of Coconut Creek, Florida. Attended Florida Atlantic University with advanced training in computer crime investigations and computer forensics. A Certified Information System Security Professional (CISSP), Certified Protection Professional (CPP), Certified Information Systems Auditor (CISA), Certified Information Security Manager (CISM), Certified Fraud Investigator (CFI) and Certified Homeland Security – Level 3 (CHS-III).

Daniel Myung Chief Executive Officer

Daniel brings 20 years of leadership, management and operations in the finance industry. He is currently the CEO of NESS, Inc., a Norwegian Solar Development and Finance company. Mr. Myung's responsibilities include partnership management and execution of large scale solar projects. His financing experience includes issuing bonds for a leading credit card company. In renewable energy, he has led strategic planning for US Army Energy Initiative Office responsible for \$2 billion (USD) in renewable projects in the Department of Army, Pentagon and has developed

local projects totalling over 20 MW. Mr. Myung is a certified public accountant with a MBA from Wharton School of Business, University of Pennsylvania.

Terje Normann *Chief Risk Officer*

Mr. Normann supported over \$3 Billion of debt financing in the renewable energy industry, both from a regulatory and financial perspective. His assignments include over four years as Relationship Manager in the Renewable's Division of DNB, Norway's largest bank. He also supported renewable energy as an executive at Pareto Securities in Norway, Sparebank 1 in Norway, The Norwegian Export Credit Institute (GIEK), and the Norwegian Ministry of Petroleum and Energy. Mr. Normann holds an MSc in Finance, is a CFA charter holder, and a member of the CFA Institute.

Ole Jakob Sjørdalen *Director of Research*

Ole began his professional career as a researcher for the European industrial technology company ABB in 1994, working on automatic and control & optimisation. After 10 years at ABB, Ole moved to Singapore to become the counselor of science and technology for South East Asia for Innovation Norway, a part of the Royal Norwegian Embassy, eventually becoming Sector Head of Energy and Environment. In 2012, Ole moved to Eltek, where runs research for energy and smart grid projects. Ole received his Masters in Electrical Engineering from the Department of Engineering Cybernetics and a PhD in Automatic Control from the Norwegian Institute of Technology.

Damon Wade *Chief Executive Officer*

Mr. Wade has a Bachelor of Science in Electrical Engineering and has maintained status as a Professional Engineer from the Engineering Council in the United Kingdom. After moving through the ranks of Bermuda's primary energy company, BELCO, Mr. Wade served as Vice-President of Customer Service before becoming the General Manager and Executive Vice- President of Bermuda Gas & Utility Company Ltd., formerly a wholly owned subsidiary of the Ascendant Group. Prior to his tenure at Bermuda Gas, Mr. Wade earned an MBA and was able to combine his years of engineering experience with strong leadership qualities to guide Bermuda Gas from its worse financial year in 70 years, to the best financial year in the history of the company with annual revenues in excess of 20 million dollars.

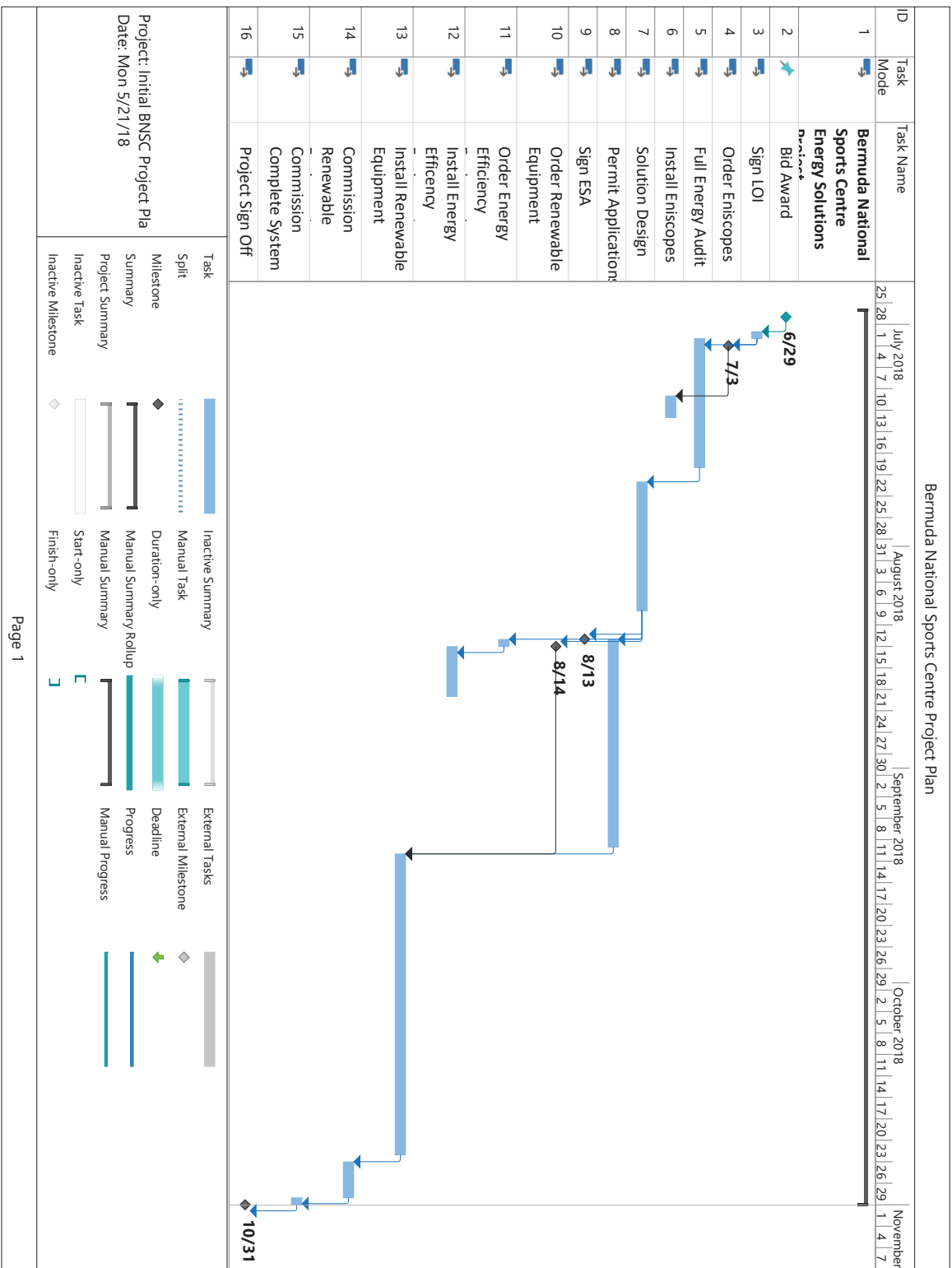
Over his more than 20 years in Energy, Mr. Wade also served as an executive member of the Bermuda Association of Professional Engineer (BAPE) and Chairman of the Professional Engineers Registration Council (PERC).

Calvin Minors *Chief Operations Officer*

Mr. Minors is a certified Project Manager and has a Law Degree from Buckingham University, England. Mr. Minors has executed or overseen the incorporation, set-up, structure, man and system management, operations, logistics and customer relations of numerous companies and has personally lead over 11 million dollars in construction projects to completion.

Mr. Minors has a passion for helping up and coming entrepreneurs and provides quotes, contract analysis and management assistance to many small businesses and construction companies on a pro bono basis.

Phase 5 – Project Implementation (BOOT)



Please find below a list of contacts to confirm projects delivered on time and on budget. The list of contacts were selected for efficiency as they can attest to multiple projects on their behalf.

ELTEK INFORMATION	
Name of Corporation	Eltek AS
Parent Company	Delta Electronics, Inc
Corporate Address	Graaterudveien 8, 3036 Drammen, Norway
Phone Number	+47 3220 3200
Contact Person	Kenneth Bodahl - EVP kenneth.bodahl@eltek.com
Project list	60 MW solar pond (China), 13MW solar rooftop (Port of Los Angeles) 4.5 MW solar park (Namibia), 1MW Surat Municipal solar rooftop (India), 1MW Solar Rooftop Katra Railway Station (India)

BERMUDA COLLEGE INFORMATION	
Name of Organisation	Bermuda College
Corporate Address	21 Stonington Avenue, South Road, Paget PG04 Bermuda
Phone Number	+1 441 239 4004
Contact Person	Dwight Furbert - VP Finance & Operations dfurbert@college.bm
Project list	92 meter point installation, energy audit (\$90K p/m bill), transmission & distribution optimisation

CEDARBRIDGE INFORMATION	
Name of Organisation	CedarBridge Academy
Corporate Address	1 CedarBridge Lane, Devonshire DV02, Bermuda
Phone Number	+1 441 278 1581
Contact Person	Stuart Crockwell - COO Operations scrockwell@cedarbridge.doe.bm
Project list	70 meter point installation, (\$65K p/m bill), transmission & distribution optimisation, chiller optimisation (in progress)

Indication of proposal group's financial activity in the Energy Savings market over recent years

Project Name	Description	Status	Spending
Bermuda College	energy audit, realtime metering, sub metering, voltage reduction	completed 2018	\$150,000
Solar Farm Vandel	125MW ground mount installation in Denmark	completed 2016	\$237,000,000
Solar Farm Ako City	4.6MW in mountainous area Hyogo Japan	completed 2016	\$8,740,000
Stokes Point	energy audit, meter monitoring, 10kw ground mount, timers, capacitors, battery storage, 10'x10' building to house storage, inverters, etc	completed 2016	\$115,000
Resort World Bimini	energy audit, recommendations for energy efficiency initiatives	completed 2016	\$45,000
Westmont Solar Project	over 50,000 solar panels installed in to cover 50acres roof space	completed 2017	\$26,000,000
Cedarbridge Academy	energy monitoring, chiller optimisation, energy efficiency via capacitors, LED Lighting	ongoing	\$160,000
Genesee County Economic Development Centre	50 acre parcel of land to develop proposed 15MW solar project. Have Signed MOU to utilise land for proposed site (forecasted value \$28M)	ongoing	\$38,000
TOTAL			\$272,248,000.00

Summary

Our solution does not follow a traditional cost / benefit analysis with a payback period, as the Centre will be in a net cash positive position, the instant our energy solution technology suite is deployed. The focus of the cost/benefit analysis is on energy savings and supplemental improvements that will be gained through the implementation of our complete solution.

Energy saving improvements were measured using three factors: **a.** evaluation of the Centre's recent energy costs history, **b.** evaluation of Belco's Integrated Resource Plan recently submitted to the Regulatory Authority highlighting their anticipated costs and activity over the next 20 years and **c.** maximum anticipated costs of our complete micro-grid solution.

This section describes the major benefits expected to result from our solution. To the extent these benefits are quantifiable, a dollar value has been determined. The financial benefits have been compared to the expected system costs and will illustrate a 15-20% reduction on existing costs.

Recent Energy Cost History

Month	2016	2017
January	\$41,933.29	\$52,290.54
February	\$52,366.54	\$49,857.76
March	\$43,940.98	\$49,160.68
April	\$37,576.05	\$44,793.69
May	\$30,673.17	\$33,706.97
June	\$36,174.67	\$36,806.88
July	\$42,409.65	\$43,788.10
August	\$49,399.49	\$43,634.62
September	\$42,561.10	\$36,314.41
October	\$36,789.89	\$35,429.95
November	\$45,296.90	\$38,755.06
December	\$50,770.20	\$46,003.17
ANNUAL COSTS	\$509,891.93	\$510,541.83
Average Monthly Cost	\$42,490.99	\$42,545.15
Two Year Average Monthly Cost	\$42,518.07	
Two Year Average Annual Cost	\$510,216.88	
Proposed Annual Savings (20%)	\$102,043.37	
Proposed Annual Cost	\$408,173.51	
Proposed Monthly Cost (lease value)	\$34,000.00	

Summary of Quantified Benefits

Year	2018	2019	2020	2021	2022
NSC	\$510,216	\$510,216	\$510,216	\$510,216	\$510,216
NSC with Solution	\$495,541	\$408,000	\$408,000	\$408,000	\$408,000
Annual benefits	\$14,675	\$102,216	\$102,216	\$102,216	\$102,216
Cumulative benefits	\$14,675	\$116,891	\$219,107	\$321,323	\$423,539

Year	2023	2024	2025	2026	2027
NSC	\$510,216	\$510,216	\$510,216	\$510,216	\$510,216
NSC with Solution	\$408,000	\$408,000	\$408,000	\$408,000	\$408,000
Annual benefits	\$102,216	\$102,216	\$102,216	\$102,216	\$102,216
Cumulative benefits	\$525,755	\$627,971	\$730,187	\$832,403	\$934,619

Year	2028	2029	2030	2031	2032
NSC	\$510,216	\$485,013	\$485,013	\$485,013	\$485,013
NSC with Solution	\$408,000	\$408,000	\$408,000	\$408,000	\$408,000
Annual benefits	\$102,216	\$77,013	\$77,013	\$77,013	\$77,013
Cumulative benefits	\$1,036,835	\$1,113,848.00	\$1,190,861.00	\$1,267,874.00	\$1,344,887.00

Year	2033	2034	2035	2036	2037
NSC	\$485,013	\$485,013	\$485,013	\$485,013	\$485,013
NSC with Solution	\$408,000	\$357,378	\$357,378	\$357,378	\$357,378
Annual benefits	\$77,013	\$127,635	\$127,635	\$127,635	\$127,635
Cumulative benefits	\$1,421,900	\$1,549,535.00	\$1,677,170.00	\$1,804,805.00	\$1,932,440.00

Assumptions:

- present Utility Kwh value used throughout - though as high as 3% increase can be experienced as Belco has received permission to replace 56MW of generation equipment
- whatever happens regarding RA permission for rate increase, anticipated decrease in costs has been injected by year 10
- Additional 10% reduction injected end of year 15 to increase savings to 30% Present Value
- Benefit experienced in 2018 assumes project commences within 3rd quarter of said year

Summary of Unquantified Benefits (*pros/cons of operating & maintaining ESI solution*)

Real-Time energy monitoring & control: the metering system allows us to monitor the electrical distribution and plant equipment at all times. It enables us to set parameters for ideal conditions and sends alarms to our system in the case of voltage spikes or any other activities that could negatively impact your energy system and the equipment connected to it. Daily reports are issued electronically to whoever the Centre would like to receive such information cutting down on paper and the time required to physically inspect the facility

Reductions in maintenance costs: with the energy efficiency technology provided within our solution, current equipment at the facility will run with less heat therefore reducing wear and tear on the equipment, increasing the efficiency and lifespan to electrical distribution and plant equipment.

Onsite Contingencies: the increased energy independence of our micro-grid solution incorporates contingencies via battery back up to increase the Centre's energy resilience and minimise operation interruptions that could impact revenue earning opportunities.

Positive PR: with the visible renewable generation for the micro-grid, the Centre reduces its carbon footprint and markets a visible 'Green Initiative' which is well received amongst users and perspective users locally and abroad.

Retained use of land: with a Solar Car Park as part of the energy source for the micro-grid, the current usage of available space is maintained and no mounting is required on existing structures that may need replacement in the near future. The space available for further development and more revenue earning opportunities is minimally impacted.

Provides mounted shade and shelter from the elements: Solar car park offers great shelter from the rain and Sun. Significant increase in electric vehicles is anticipated by BELCO and globally, world renowned futurist, Tony Seba has forecasted majority electric vehicle transport by 2030. At least 2 charging stations has been incorporated into the solution enabling perspective Sports Centre clients a place to charge up whilst using the facility.

Helps meet Centre's sustainability goals: with cumulative reductions in energy costs, the Sports Centre has freed up capital it could allocate to caring for existing infrastructure or new infrastructure increasing revenue. Our ESI Solution also enables the NSC to plan more effectively by removing fluctuating costs or increases that could occur as a result of forecasted Utility upgrades and refurbishment.

No additional charges for operations & maintenance of System: During the life of the lease there are no additional operations and maintenance costs associated with the system. All costs have been included during the life of the lease including any repairs to the system.

Overview

In recognition of the financial constraints on the NSC, as previously stated, our solution is built on a “lease-to-own” model. The investors included as part of our group (refer pg.7) will be repaid via the Energy Service Company (**ESCO**).

The solution costs will be repaid through a finite lease, Energy Service Agreement (**ESA**) that will ensure the monthly payment amount is less than your current average monthly bill. This will guarantee your average annual energy costs are significantly reduced and put the NSC in a positive “**net cash**” position after the first month interconnection has been established.

The completed solution will require no additional costs to install, run or maintain and will remove the current costs covered by your main electricity bill.

Summary of Arrangement:

DESCRIPTION	UNIT	VALUE
GENERAL TERMS		
Proposed reduction on Average Monthly Cost	%	20
Current Average Monthly Cost	\$	42,518
Proposed Monthly Cost	\$	34,000
Annual Net Savings	\$	102,216
Term*	yrs	20
ADDITIONAL BENEFITS		
Increased Reduction to Present Value	%	30
Year Reduction implemented	yr	15th
Reduced Monthly Cost	\$	\$29,781
Anticipated Annual Financial Commitment to Project by NSC (replaces annual financial commitment currently \$510,000)	\$	408,000

What is the anticipated annual financial commitment to the project required by NSC?

There is no additional financial obligation to the NSC by executing the project. As previously demonstrated by the financial forecast (pg 27), the NSC will replace a \$510,000 per year BELCO expense with a \$408,000 per year ESCO expense.

Who will own the ESI system/s installed?

The ESCO will own the system until the Lease Term is complete. During the life of the system in the 20th year complete ownership transfers to NSC. At such time NSC will have several options:

1. Renew a Lease for up to 10 years in two (2) five (5) year renewal periods. (renewal forms will be sent 3 months prior to the expiration of the Lease Term, setting forth the new Monthly payments due under renewed Lease, based on our assessment of the then fair market value of the System)
2. If no renewal is confirmed the Lease shall renew for an additional year term at 25% less then the current monthly rate specified in the lease (by such time the lease costs will already be 30% lower than present value. The additional 25% will total 55% less then present value with all lease benefits remaining)
3. Take complete ownership of System. Continued Maintenance can be paid to the ESCO or NSC facilities staff can be trained to Maintain system
4. A new system can be installed with a new Lease Term. (It is anticipated renewables at such time could be 70% lower then present value)
5. If complete transfer option is chosen condition 3 above would prevail at no transaction cost to the NSC - the system is now owned by NSC

Who will maintain the System during and after the project period?

There will be no annual maintenance costs to the NSC during the project Lease Period. Once the lease period has elapsed if the NSC choses option 5 above an annual maintenance cost can be evaluated at such time. (anticipated to be approximately \$36,000 per annum)

For any further questions or queries related to the NSC ESI please contact:



Damon Wade BSEE, MBA, CEng., MIET
Chief Executive Officer
2 Cherry Hill Park / Paget / PG03 / Bermuda
email: dwayne@atlanticenergysg.com
direct phone: 441 591 -7173