Information & Energy Services, Inc.

Request for Proposals – City of Novi Energy Audit
Attn: Finance Department
45175 Ten Mile Road
Novi, MI 48375

Due March 6, 2025 by 2:00pm

Legal Name of Firm: Information & Energy Services, Inc. (IES)

Company Headquarters: 21951 Purebred Ln. Escondido, CA 92029

Michigan Office: 815 Sleeth Rd. Commerce, MI 48382

Contact Name/Owner: Michael Rogers

Primary Contact Phone Number: 760-908-6321

Primary Contact Email: mrogers@iesenergy.com

Tax ID Number (EIN): 55-0830534

IES
Information & Energy Services, Inc.

www.iesenergy.com

February 24, 2025

City of Novi
Attn: Finance Department
45175 Ten Mile Road
Novi, MI 48375

Re: Request for Proposals – Energy Audits

To Whom it May Concern,

Information & Energy Services, Inc. (IES) was established in 2003 and is headquartered in San Diego, CA. IES employees combined have over 130 years of experience in the energy industry. IES has satellite offices located throughout the United States including one located in Commerce, MI. Over the years, we have successfully served a diverse clientele, including but not limited to municipalities, military bases, Federal Government, K-12 schools, universities, hospitals, commercial, industrial facilities and various other facility types.

At the core of our energy initiatives are comprehensive energy audits, which serve as the foundation for recommending energy-saving measures tailored to each customer. These audits encompass high-level investment grade assessments, ASHRAE Level I, II, and III audits, as well as renewable energy feasibility assessments. In the past calendar year alone, IES conducted nationwide energy audits at over 300 buildings, with over half of those being for municipalities.

We are grateful for the opportunity to collaborate with the City of Novi to recommend possible energy and water conservation projects.

Sincerely,

Michael B. Rogers, P.E., C.E.M.
President
760-908-6321
mrogers@iesenergy.com

Firm Information

Firm Name: Information & Energy Services, Inc. (IES)
Owner/Principal's Name: Michael Rogers P.E., C.E.M
Number of Employees: 13
Years in Business: 21 years (inc. May 2003)
Headquarter Location: 21951 Purebred Lane, Escondido, CA 92029
Michigan Location: 815 Sleeth Rd. Commerce, MI 48382
Types of Certifications:
IES holds a variety of licenses and credentials including two CA Professional Engineers (PE #M30484, #M41755), AZ Professional Engineer (PE# M54788), NV Professional Engineer (PE# 027837), TX Professional Engineer (PE# 148031) California General Contractor License (CCL #867847), as well as multiple staff certifications for Certified Energy Manager (CEM) (#003596, #004768 and 26348), LEED Green Associate (#11093877, U.S. Green Building Council), Certified Building Commissioning Professional (CBCP# 2174 Association of Energy Engineers) Building Commissioning Professional Certification (BCxP# 8395185), and Project Management Professional PMP (#1939222, Project Management Institute).

IES was incorporated in 2003 in and has spent the last 21+ years performing a variety of energy consulting services throughout the United States. IES has audited thousands of locations throughout the United States, providing millions of dollars in energy savings recommendations. These services include, but are not limited to:

- Energy efficiency audits (ASHRAE Levels 1, 2 and 3, investment grade audits, etc.)
- Measurement & verification (M&V) services following IPMVP standards
- Whole building energy modeling
- Targeted energy modeling
- Renewable energy project feasibility studies and project development, including an emphasis on resiliency through microgrids, battery energy storage systems (BESS), etc.
- Electric vehicles (EVs), charging infrastructure and planning studies
- Utility provider rate analysis
- Assisting in compliance with new & changing building regulations
- Retro-Commissioning (RCx) Projects including those facilities with very tight tolerance such as hospitals and other research facilities
- Preparation of RFPs, bid support and construction management support on behalf of clients

Our mission is to improve energy and water efficiency for our customers, eliminating energy waste wherever possible while reducing energy costs in the process. At the same time, we understand the financial constraints many of our customers face and strive to identify all No & Low-Cost opportunities, available rebates/incentives and grants or other funding mechanisms. Many of our jobs have resulted in the implementation of high efficiency HVAC, LED lighting, Controls optimized for reducing consumption and implementing demand response procedures, improving electrical distribution, and Battery Energy Storage Systems (BESS). In some instances, these improvements were completely paid for by utility incentives.

IES has grown alongside the energy market and done work on both the supply and demand side of past projects. As a small company we remain flexible in our operations, realizing from the start that 100% customer satisfaction is vital to success. This flexibility allows us to perform services in a time-efficient matter at a competitive cost. As we continue to grow, we do not want to lose sight of our customer-oriented focus. Forming close relationships with our customers is vitally important to our continuing vision. IES takes pride in maintaining a multi-contractual relationship with many of our customers. We aim to make every client feel as if they are a part of the team themselves. We are always just a phone call away no matter the question and work to get requests done in a timely and effective manner.

Project Understanding and Approach

IES has extensive experience providing energy conservation and advising services to Industrial, Commercial, Federal, School Districts, and other types of facilities throughout the United States. IES has successfully completed hundreds of ASHRAE Level I, II and III audits across a wide range of facility types, including over 200 municipal buildings. These audits resulted in $240.9 million worth of contracted energy efficiency projects at 129 municipal buildings, with those measures in various stages of completion at present. We feel that our experience with multiple types of facilities qualifies us to perform the tasks set forth in the objectives of the RFP in an expert fashion.

To meet the City of Novi energy goals, IES will investigate all aspects of energy usage. These areas generally include:

- Lighting
- HVAC
- Controls for HVAC, Lighting, Refrigeration, etc. (optimize Sequence of Operation for Energy Efficiency & Reducing Demand)
- Plug Load Appliances
- Refrigeration
- Energy Use and Behavior
- Renewable Energy Potential and Opportunities

Project Approach

The IES ASHRAE Level II Energy Audit Process will be conducted as follows:

- IES will conduct a Preliminary Meetings (Kick Off) through teleconference or in person where our Team will meet with the City Staff including the facilities management and other key representatives to lay out the audit process and to get a feel for each building's energy and water use. This will sharpen our focus towards the buildings energy saving goals and tailor recommendations towards those City Staff are interested in. We will consider the current energy usage; occupancy schedule and what buildings have had recent upgrades to determine optimal recommendations.
- After gaining the information from the Preliminary Meeting IES will work with the customer or Customer's Utility Providers (DTE, State of MI Energy Office, Federal Agencies, etc.) to gather at least the last 12 months of utility data. This is an integral part of establishing "Baseline" energy use for each building.
- Working directly with the City of Novi, IES will schedule a date to audit each building. IES plans on conducting all the on-site audits over 2 to 3 days in a single week. IES will need full access to these buildings in order to collect detailed

information on all energy consuming equipment and identify energy savings measures. Primary audit goals include but are not limited to:

- Identify all data necessary on Equipment/Systems operation
- Identifying both low cost and capital energy and water conservation measures
- Interview with site staff to determine optimal efficiency strategies given current building practices
- Identify onsite renewable energy opportunities: Solar PV, solar thermal, cogeneration
- Identify offsite renewable energy opportunities
- Identify load shedding opportunities using battery storage systems

- IES will develop a report which meets an ASHRAE Level II survey including full utility analysis, building load profiles, energy conservation measure (ECM) recommendations including measure descriptions along with the modeled outputs such as the load balance broken out by energy using equipment, ECM savings, estimated costs, available rebates and overall payback.
    - IES anticipates developing a single report for the City of Novi. This report will outline findings for all buildings and organize energy conservation measures (ECMs) by building, along with recommendations for which measures should be pursued. IES is agreeable to providing separate reports for each site if desired.

Throughout the process, IES will give bi-monthly (every 2 weeks) updates on the current status of the energy audits and savings analysis through project close. IES will continue to support the City and key representatives post-audit to answer any ongoing questions about measures and provide support in the implementation of recommended measures.

The ASHRAE Level II audit report will include:

- **Executive Summary** of process and results

- **Synopsis** of site characteristics, including:
    - Facility overview
    - Site map
    - Energy systems summary for lighting, HVAC, refrigeration, etc.
    - Utility data analysis of last fiscal year for electricity, gas and water
    - Overview of previous energy projects

- **Site Energy Use Index (EUI)**

- **Load Balance and Energy Modeling**

- **Recommended Measures**
  - Measure description (area served, operating schedules and sequences, suspected issues, etc.)
  - Measure savings, cost impacts, CO2 levels, etc.
  - All measures will have a Simple Payback Period of less than 50 years unless approved for Targeted Measures only.

- **Renewable Energy Opportunity Summary** of renewable measures which could benefit the site

- **Any Additional Recommendations**
  - Includes measures with longer paybacks to be considered in the future as well as any improvements to health, safety and environment

- **Full Calculation Appendix**
  - Includes all calculations for measures described in the report
  - Includes full equipment database for lighting, HVAC, CO2 levels and other energy using equipment

- **Submission of the Report**

Finally, IES will ensure that the City and other key representatives have a working understanding of all energy savings measures and any new practices or equipment and will continue to be available for a walk of the five sites at the conclusion of the report to point out the energy efficiency improvement opportunities and after the project term to support the City of Novi's efforts.

Experience

The following summaries of both current and recent projects detail work which would be relevant to the services the City of Novi is requesting. Project references are included as well.

City of Fresno Phase 2 Energy Efficiency Project, Fresno, CA
Project Reference: Jake Torres, Director of Sales at ABS Energy, (858) 886-9447. 12520 High Bluff Dr. Ste. 345., San Diego, CA 92130
Dates of work: January 2021 to Present (Phased Approach, currently in phase 2)

IES has worked with ABS Energy on several projects within the last 5 years. One of the largest projects IES worked on was the City of Fresno Energy Conservation Project. The project encompassed identifying energy conservation measures throughout 59 facilities across all the city's parks, community centers, all police and fire stations, and several Administrative Buildings. IES was responsible for conducting site walkthroughs and developing full lighting (interior & exterior), HVAC, electrical distribution, pumping and controls assessments at each of these facilities.

IES has been responsible for developing project recommendations for replacement of interior and exterior lighting with LED fixtures, replacement of old HVAC units, addition of new HVAC controls and replacement of old transformers. Solar systems were also assessed at several locations. Within the recommendations an economic evaluation was conducted in both a simple payback and a life cycle analysis.

The final project will deliver over 2,500,000 kWh annual savings, saving over $550,000 per year from the optimization, a savings of approximately 36% over the baseline. This energy savings equates to a reduction in CO2 Emissions of 1,953 Tons annually. IES has worked with implementation contractors and the city through contracting and implementation is going to be completed very soon. A follow-up project at the Fresno Zoo was also completed which evaluated similar measures in addition to specialty measures affecting animal enclosures and support structures.

City of Tempe Comprehensive Energy Audits, Tempe, AZ
Project Reference: Charlie Bladine, Facilities Manager, (480) 350-8563. 31 E. 5th St., Tempe, AZ 85281
Dates of work: March 2022 to Present

IES was selected to perform comprehensive ASHRAE level 2 energy audits for several facilities managed by the City of Tempe. To date, IES has audited two water treatment facilities for the City. Our recommendations of these two sites did not include any process

related (i.e.) pumping operations at the request of the City- however, identified savings measures would save over 300,000 kWh/ year and 24,000 gallons of water/year if measures were implemented. We continue to stand by as a resource for the City in the event that they wish to pursue implementing any of the requested measures, or should they wish to have more City facilities audited.

Sweetwater Union High School District, Chula Vista, CA
Project Reference: Ronald Malone, Director of Maintenance for SUHSD, (619) 691-5565. 642 Arizona St. Chula Vista, CA 91911
Dates of work: 2016 through Present

IES has worked with Sweetwater Union High School District (SUHSD) on numerous projects going back to 2008. Our most recent efforts began in 2016 with California's Proposition 39 project, which granted millions of dollars in State funding to K-12 public schools for the purpose of updating their energy using equipment to more efficient technologies. This involved performing ASHRAE Level 2 audits at all sites and developing a comprehensive project to utilize the Prop. 39 funds across all schools in an equitable manner. We worked with the District's Superintendent and Maintenance Office, along with the District's third party planners to develop a project bringing interior and exterior LED lighting and controls retrofits to all 27 campuses. HVAC and HVAC controls replacements were also included at nearly half of the schools in the District. The project was developed in a way to maximize energy savings and meet the District's equipment replacement needs while staying within the budget constraints of the State grant funds and ensuring that all site's received a significant portion of those funds. We worked with the District in tracking the performance of the newly installed measures and completed a State verification report tracking the use of the grant funds. The implementation of these measures reduced the District's electricity use by 17%.

IES has acted as the District's Energy Manager since the conclusion of the Prop. 39 program. We oversaw energy expenditures over this time, including during the COVID-19 pandemic. This was extremely unique with regards to forecasting the district's energy expenditures during a constantly evolving scenario. Along with providing an accurate forecast of the district's energy expenditures in these years, these actions led to several recommendations and actions to reduce energy use, which were realized. The most significant of these actions was the ongoing review and changes made to the District's multiple control systems, which eliminated unnecessary HVAC use while campuses were closed. Between April 2020 and June 2021, the approximate value of the avoided HVAC use came out to $2.6 million, a decrease of 43% from their stated FY 20-21 energy budget of $6.1 million, which was a direct result of our engineers' identifying areas where the

HVAC could be shut down and then directly adjusting site schedules to shut down the HVAC upon District approval.

Our energy management tasks have also included: setting up a monthly utility tracking matrix where energy is tracked by meter and by site, development of an HVAC condition matrix, site walks during District breaks to determine if any equipment was running while the campuses were closed, post site visit in depth analysis of each campus within the District, energy reporting on a District wide campus by campus basis, benchmarking of schools types utilizing EUI to determine which campuses are higher energy performers and which ones are lower energy performers, numerous reviews and adjustments of the District's HVAC control systems through the pandemic, continuous optimization of controls with respect to scheduled hours along with holidays to eliminate excess runtime without, the creation and upkeep of inventory matrices for the District's HVAC equipment, lighting and refrigeration, ongoing monthly review of the District's utility billing and review of the solar generation and power purchase agreements (PPAs) at each of the District's solar-equipped sites, identification of funding sources for energy related programs such as electric buses and electric vehicle charging stations and review of energy saving technologies presented to the District throughout our term.

The HVAC matrix we have developed and continue to maintain is utilized to easily decide which units at which sites need replacement soonest, making it easier to budget accordingly. This matrix has assisted in developing an HVAC controls replacement project enhancing the systems at five of the campuses with additional scope for HVAC replacements.

Additionally, we were able to identify solar PV metering issues with the District's PPA provider and worked with the provider to correct these issues.

As a result of our management, the District saved over $2.6 million from its FY 20-21 energy budget of $6.1 million. Other accomplishments were identifying and renewing the District's 3rd party power agreements and managing the installation of new energy efficient lighting, controls, high efficient HVAC and a battery energy storage system through SDG&E's IDSM program. This program installed over $600,000 worth of energy saving technologies at the District Office which will save the site approximately $31,000 per year in energy costs, reducing electricity consumption by 47% while minimizing their carbon footprint, all at no cost to the District.

Integrated Demand Side Management (IDSM) Pilot Program, San Diego County, CA
Project Reference: Sandra Williams, Project Manager III for SDG&E, (619) 676-8850. 8330 Century Park Ct. San Diego, CA 92123

Dates of work: 2019 through March 2024

IES designed, administered and managed the IDSM pilot program on behalf of SDG&E. Through the program, select customer sites within SDG&E's service territory received energy efficient LED lighting, lighting controls, HVAC, HVAC controls, energy efficient transformers, battery energy storage systems (BESS) and refrigeration optimization at no cost to the customers. Customers included local Grocery Outlet grocery stores, a school district office building, Petco Park, a local university campus and a couple of commercial manufacturing buildings.

The scope of work IES developed and subsequently oversaw included:

- retrofitting recessed troffer lighting fixtures with an LED troffer retrofit kit with integrated lighting controls.
- Lighting controls were optimized to the desired maximum output and outfitted with dimming capabilities for ambient light levels and occupancy on an individual fixture basis. The lighting controls in select spaces were programmed to respond to demand response (DR) events, dimming where allowable during such events and reducing building load.
- Select HVAC units were replaced as needed with new high efficiency units, and networked programmable web-based thermostats were installed to allow for a highly functional and cost-effective control solution. These were programmed to allow for a temperature set-back during a DR event, reducing building energy loads in these events.
- Transformers were replaced as needed with new high efficiency transformers to decrease load losses in the electrical distribution system and further improve building efficiency.
- A (62.5kW/250kW) battery energy storage system (BESS) was installed at most sites and was programmed with a sequence of operation based upon each site's individual load profile and utility rate tariff to reduce the overall cost of power by discharging the battery at peak times.
- Finally, sites which had a walk-in refrigeration system had those system's optimized through an initial retro-commission of the walk-in unit and then the installation of a thermal energy storage (TES) system with controls. The added thermal mass from the TES allows for the refrigeration system to run at a constant lower load thus improving efficiency. The additional thermal mass allows the box to stay colder for extended periods during power outages, improving resiliency at these locations.

The IDSM project was very comprehensive with respect to the work performed by IES as we:

- designed the Program Offering (measures offered, quantity of units to be replaced, etc.),
- selected the trade contractors through a formal RFP process for lighting, HVAC replacement, controls (lighting & HVAC), transformers, refrigeration optimization and battery storage systems, and
- managed the selected contractors through project completion, facilitating all communications regarding project milestones with each Customer and the utility.

The program has wrapped up with successful installations at seven (7) sites throughout San Diego County.

Fee Proposal Form

CITY OF NOVI

ENERGY AUDIT

FEE PROPOSAL FORM

We the undersigned as proposer, propose to furnish to the City of Novi, according to the specifications, terms, conditions and instructions attached hereto and made a part thereof:

Site Name	Square Footage	Cost per Square Ft	Total Cost
Civic Center	71,000	$0.12	$8,520
DPW	75,000	$0.12	$9,000
Firearms Training Ctr	7,800	$0.15	$1,170
Fire Station #4	11,380	$0.15	$1,707
Novi Ice Arena	71,000	$ 0.12	$ 8,520

TOTAL **$** 28,917

We acknowledge receipt of the following Addenda: Addendum #1
(please indicate numbers)

EXCEPTIONS TO SPECIFICATIONS (all exceptions must be noted here):

_____

_____

_____

_____

COMMENTS: _____

_____

_____

REFERENCES: Please provide at least three client (3) references for projects of similar scope done in the last 3 years.

Company ABS Energy

Address 12520 High Bluff Dr. Ste 345 San Diego, CA 92130

Phone 858-886-9447 Contact name Jake Torres

Company City of Tempe

Address 31 E. 5th St. Tempe, AZ 85281

Phone 480-350-8563 Contact name Charlie Bladine

Company Sweetwater Union High School District

Address 642 Arizona St. Chula Vista, CA 91911

Phone 619-691-5565 Contact name Ronald Malone

THIS PROPOSAL SUBMITTED BY:

Company (Legal Registration) Information & Energy Services, Inc.

Address 21951 Purebred Ln

City Escondido State CA Zip 92029

Telephone 760-908-6321 Fax

Representative's Name Michael B. Rogers

Representative's Title President

Authorized Signature

E-mail mrogers@iesenergy.com

Date 3/5/2025