REALTERM ENERGY

Death by a Thousand Specs: How Counterproductive RFP Norms are Limiting Results

HOW VALUE BASED RFPS ARE BETTER FOR YOU, YOUR CHOSEN VENDOR, AND YOUR CITIZENS

This White Paper provides a high-level overview of current norms that drive most municipal and utility RFPs for lighting services and puts them into context. Some considerations for utilizing lifecycle costing, value-based scoring, and more consultative processes to improve end results are also provided.

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WHITE PAPER VALUE-BASED STREETLIGHT RFPs

Writing a good RFP is arduous, finding the right bidders is time-consuming, and deciding between qualified and capable firms can be very difficult. Responding to RFPs is a time-consuming and expensive exercise that sometimes involves making guesses based on faulty inputs. Taking all of this time, effort, and expense into account, why do so many RFPs not provide value?

Ideally an RFP promotes competition, standardizes the evaluation process, reduces potential for bias, and decreases risk to the issuer. Great RFPs do all this while also reducing risk to the vendor, enhancing the quality of proposals, and enriching the value proposition to both parties. A competitive procurement process is vital to ensure the products and services purchased by public agencies and/or utilities offer the best value and quality to those entities and the citizens they serve. RFPs are often used because they provide a sense of legitimacy, transparency, and fairness. This guards the integrity of the process and the interests of the organization, stakeholders, and the public.

While still requiring a good deal of time and staff resources, poor RFPs do not achieve any of these key objectives. Common causes of poor RFPs are:

- an overreliance on one issue (usually price),
- conflicting or too many specifications, a lack of clarity,
- simplistic scoring methods,
- not allowing for vendor input,
- a lack of understanding of available products or
- the marketplace in general.

Most vendors have their own treasure trove of impractical requirements they have encountered such as submitting an enormous number of paper copies (15+), multiple copies of the same digital file (?), requirements for font styles and sizing, and requirements that directly contradict earlier requirements being a sure sign of a poorly copy-and-pasted RFP. More commonly, RFPs and those managing them attempt to thwart any type of interaction with the vendors, doing everything they can to prohibit vendors from connecting with anyone involved—dooming the process to fail.

Exploiting an RFP as an economic development tool by requiring products and services to be sourced locally can also be troublesome. While buying local is generally to be commended, this can often run counter to state and international law and also result in a limited pool of inferior vendors. While there are 5-6 high-quality, US-based manufacturers of LED streetlights, all of them utilize components from several international, sub-contracted manufacturers and often from each other—making a determination of what is the most local product next to impossible.

WHEN TO IFB, RFI, OR RFQ INSTEAD OF RFP

A Request for Quotation or Invitation For Bid (IFB) is preferable to an RFP when the author is after a specific commodity that can be assessed by relatively few mandatory requirements. This approach can work for obtaining streetlight installation services once the product has been selected and photometric designs produced.

A Request For Information (RFI) is a useful tool to start the conversation and to learn about products and services new in the marketplace. The RFI method is useful to gauge the current state of the available smart city (or IOT) applications as this is a rapidly changing marketplace with hundreds of potential applications, not all of which are relevant to a particular municipality or utility.

Several municipalities and utilities have also benefitted from a Request For Qualifications (RFQ) process conducted by a group procurement agency, sector-based association, or state agency. The end result of the RFQ process is a short-list of qualified vendors that provides individual municipalities or utilities with peace of mind and enables them to conduct a streamlined procurement process. Responses are also enhanced as the pre-qualified vendors recognize all opportunities are serious and can cater to the specifics of each entity.

Then there are the completely disingenuous RFPs: those with deadlines 5 business days after being posted, those with specifications only one provider can supply, those that allow hundreds of responses, as well as some that seem more satirical than serious.

> **"Whenever a qualified supplier decides to 'no-bid' an RFP/IFB, it is a potential loss for the agency. The agency loses the opportunity not only to provide the best products, solutions, and services, but also to learn from the supplier's experience, expertise, and knowledge about the latest technologies or industry trends."** (*NIGP*, Everybody Wins, p4).

These types of RFPs hurt both parties since RFPs with a combination of incredibly low budgets with outsized demands only show that the authors have not done their homework and that someone is going to be bitterly disappointed as a result. Pricing a project simply to gain leverage over an existing vendor is also an unpleasant way to conduct business that will only damage your relationship with the existing and all other vendors.

But the most common RFP flaw is being totally geared towards cost. If cost is the only factor, then why write an RFP where a simple tender would do? LED streetlights dramatically improve the quality of light offered to citizens and enhance the natural environment by consuming less energy and avoiding light trespass. LED street lighting produces considerable cost savings for local governments, utilities, and their citizens to enjoy—but not all products or services are equal. A critical factor in a meaningful comparison of options is not the initial capital cost but the lifecycle or total cost as buyers will have to pay for the energy consumed by these products long after the capital costs have been paid off. Insisting on such a value-based RFP is the most important of our Top 10 Tips for an Effective LED Streetlight RFP Process.

TOP 10 TIPS FOR AN EFFECTIVE LED STREETLIGHT RFP PROCESS

1. Develop and implement a value-based RFP.

The upfront capital cost of a good or service is only a fraction of the total cost an agency will incur when purchasing a product or service. Value-based RFPs also factor in the operating costs, and sometimes the lifecycle or total cost of ownership of the desired good or service. In its position paper *Best Value in Government Procurement*, the National Institute of Governmental Purchasing (NIGP) defines the Total Cost of Ownership (TCO) as "a measure of all of the cost components associated with the procurement of a product or service. The sum of all fixed and variable costs attributed to a product or service." These costs are balanced against the future benefits or returns resulting from acquiring goods or services. These costs and benefits may include the cost to acquire, operate, or maintain an item; expected lifespan plus the cost of insurance and of financing and disposing of an item.

While a full lifecycle cost (which adds production based and upstream environmental impacts as well) may be beyond the capacity of many procurement agents, factoring in the TCO or at least the operating cost is rapidly becoming an accepted best practice. For LED streetlight conversions, this mandates an examination of the wattages of the chosen fixtures as well as photometric design services that minimize selected wattages while ensuring the required number of lumens are delivered street level to ensure safety.[1]

[1] Photometric design should be to a recognized benchmark such as the ***IES RP-8 Guideline*** where possible or to "meet or exceed" current light levels where it is not possible to meet RP-8. At RTE we have quantified the average benefit of including design as 13% compared to a simple one-for-one upgrade, which is very material over the lifespan of the fixtures.

STREETLIGHT MATH 101

Have you ever bought a printer at a great deal only to find out later that the ink cartridges cost more than the printer? Sadly, we have all been burned by ignoring the operating costs of a product at one point or another.

Those considering an LED streetlight upgrade should calculate the Net Present Value (NPV) and Return on Investment (ROI) for each potential project offering to avoid such a negative outcome. The NPV can be calculated by using the capital outlay, energy cost ($/kWh), energy cost inflation rate (%/yr); labor inflation rate (%/year), and a reasonable discount rate. If this has been provided by the vendors insist on seeing these inputs as this can be easily gamed if not transparent. NPV and ROI are vastly superior to Simple Payback because it accounts for the time value of money, inflation, risk, and financing. Certain government agencies offer excellent, free software programs like RETScreen, to help users calculate the NPV of energy efficiency and renewable energy projects.

If your Board or Council is unsure as to the benefits of upgrading to LED streetlights you may also want to calculate the opportunity cost of not acting. One creative municipal client of ours calculated that the four-hour meeting they were having to convince upper management to move forward was going to cost them $35,000 in lost energy savings!

2. Do your research.

Define your outcomes and scope of work first, then develop evaluation criteria. You and your team should identify key needs, desired impacts, and how the proposed services will save money and staff time and/or deliver enhanced services. Any additional considerations such as warehousing and temporary storage, recycling and disposal, and internal project costs (time staff spend on the project) should be incorporated. The result should be an agreement as to what constitutes best value for the organization overall as well as key metrics and specifications by which to measure that best value. Specifications should be timely and relevant but not overly complex or limited to only one supplier.

3. Have a Pre-Bid Virtual Meeting.

A great way to demonstrate commitment to a more collaborative process, a pre-bid meeting will allow for question and answers plus valuable market intelligence and potential new ways of structuring the bid or products to enhance the value. It should also ensure you receive qualified responses from quality suppliers as opposed to the standard catchall approach.

4. Have a vision and find vendors that are aligned with your vision.

Frame your project as a challenge, question, or problem to solicit creative responses from vendors, which will allow your team to assess a broader array of potential solutions. Open bids waste time on both sides of the process and often lead to cookie-cutter responses that rehash websites and sales material. Since RFPs cost considerable time and effort to respond to you will receive better responses from vendors that have been short-listed versus the black sea of an open bid. If your organization is uncomfortable with RFPs by Invitation for some reason, an initial pre-qualification exercise may be a worthwhile first step and will cut down on a lot of extra work come RFP evaluation time.

5. Communicate often with the vendors.

Ideally this should be a conversation complete with hard questions plus the ability to proffer alternative ways of achieving the same outcomes. Talking to the team members beyond the sales person is recommended. Being open to different contracting options can also lead to creative solutions to not just the problem the RFP is attempting to solve. The outstanding NIGP Business Council White paper, ***Everybody Wins***, makes a very compelling case for the multiple benefits of a more consultative approach to RFPs.

6. Be specific about your goals.

Put the scope of work first to show you prioritize these outcomes over legal or other process. The scope is the heart of the RFP and should direct how responses are put together and how the evaluation is structured. Good scope of works include background and objectives in addition to description of the duties to be performed. All requirements should be achievable and should be able to be verified as having been met. The State of Arizona Procurement Office's guide is highly recommended for help in putting together a statement of work.

7. Share your budget.

Bidding firms will tell you what they can do with the same budget allowing for a true apples-to-apples comparison. This will also eliminate those bids that come in on both extremes, which often only skew standard evaluation systems. Used properly and with the proper oversight this can also cut down on vendors gaming your process by coming in with a very low bid but adding a great deal later through change orders.

8. Be cautious with product specifications.

Minimum qualifications or mandatory specifications should be thoroughly researched to ensure they are current and achievable by more than one firm. One New England municipality recently put out an RFP that had specs for streetlight fixtures that were three years old (usually the result of copying an older RFP) with the result that no major manufacturers could supply a product that was so inefficient! Another potential pitfall is using a third-party consultant to write an RFP—which can work well but can also result in leading specifications if that consultant recently worked at a manufacturer or has a particular bias. Specification should focus on performance measures and evaluate based on how well a product met or exceeded that measure.

The Department of Energy Municipal Solid State Lighting Consortium (MSSLC) has a ***Model Specification for LED Roadway Luminaires*** (Lightsavers has released a similar document in Canada) that while dated is an excellent starting point. The Design Lights Consortium's (DLC) Qualified Products List (QPL) is also a handy resource. We recommend referencing these guides for normative guidelines for product and other required submittals but to tailor your response to local conditions and to solicit more current input from the marketplace via the first three tips on this list.

Moreover, these guides only focus on product whereas design, installation, project management, and other services related to a complete streetlight upgrade will cost as much and sometimes more (especially when replacing poles or having to buyback equipment from utilities) than the fixtures themselves.

9. Share the governance structure.

This will clarify role and responsibilities for your team members and enable vendors to tailor bids to areas of interest. Vendors need to know who will manage the project from your team and what internal capabilities you can provide. One way of doing this is to create a Responsibility Assignment Matrix, which is an easily referenced table for the RFP team and vendor community moving forward. Best practice Responsibility Assignment Matrices utilize one column for each specific activity (ex: fields questions, prepares schedule, etc.) and another for the staff person responsible with the type of responsibility denoted by the RASCI acronym (Responsible, Accountable, Support, Consulted, Informed). While the composition and organization of the evaluation team should also be included, it is often preferable to keep this for internal purposes only. Providing such a clear organizational breakdown will also enable a strong start once the project commences.

10. Share the evaluation criteria.

Having clearly identified evaluation criteria will focus responses, greatly assist and de-risk the evaluation team, and lead to outcomes better matched to your objectives (as opposed to cookie-cutter responses). Best practice is not to provide every detail in minutiae, but to describe the process, identify the major evaluation factors and the weight assigned to each factor. This should also ensure compliant bidder and eliminate or nearly eliminate any protests afterwards. As stated earlier, the evaluation criteria for an LED streetlight replacement must focus on best-value to obtain a satisfactory outcome for your organization.

A VALUE-BASED EVALUATION PROCESS

Best practice LED streetlight replacement RFPs insist on best value approaches because as the State of Massachusetts declares: *"No one wants to save money on unit cost while encountering higher costs due to factors such as inferior quality, poor reliability, or complex administrative processes"* (Mass. Finance, p.1f) or energy costs. A common starting point is to utilize an evaluation system that selects the vendor with that has met certain minimum performance requirements and offers the lowest life cycle cost. However, many organizations also want to include other factors such as product warranty (and we would add balance sheet analysis to ensure the supplier has the resources to back up the warranty), GHG emissions reductions, the experience of the firm (highly recommended for turnkey service providers) and dedicated staff team. We also highly recommend including criteria and scoring for how the project plan will meet or exceed the project timelines, how design approach will meet safety and standardization goals while minimizing lifecycle costs, plus a project management approach that demonstrates efficiencies in time and cost.

A sample value-based score sheet for a complete streetlight conversion project is included in the Appendix at the end of this paper. Not only does it propose including total value into the scoring criteria but, it also incorporates value directly into the scoring methodology by coming up with a total value per dollar score by dividing the number of points by the proposed cost.

Those considering smart city applications into their RFP might also want to add opportunities to implement smart cities technologies that enhance the capabilities of municipal (or utility) services plus opportunities for public/private partnerships that may provide services to the public and potentially generate revenue for the City. Exercise caution around smart city as most applications have not been widely deployed (some not deployed at all), are not yet economic, or do not actually provide a service of value of most communities.

CLIENT-DRIVEN PROCUREMENT

RealTerm Energy acts as an informed but impartial advisor to our clients. Our sales and engineering teams work with municipal and/or utility staff to source the best equipment that meets or exceeds specifications and offers the best total value. Our design team optimizes the photometric design to address local standards and preferences in terms of safety, energy efficiency, and aesthetic. Our installation team competitively procures local labor, trains, and supervises them to ensure fixtures are installed properly and glare is eliminated or minimized. Our controls and smart city team works with clients to first identify their needs and capacity and then competitively procure products to serve those needs.

See our White Papers on Photometric Design and Installation Best Practices available on the RealTerm Energy website for more information.

APPENDIX: A MODEL VALUE-BASED RFP SCORING SYSTEM

Streetlight Project RFP Bid Analysis Summary Sheet

MANDATORY REQUIREMENTS:	Bidder #1	Bidder #2	Bidder #3	Bidder #4	Bidder #5
Received by Deadline	Yes	Yes	Yes	Yes	Yes
Proof of Insurance	Yes	Yes	Yes	Yes	Yes
Appendix A Checklist Complete	Yes	Yes	Yes	Yes	Yes
Appendix B Form of Proposal signed	Yes	Yes	Yes	Yes	Yes
Appendix B Form of Proposal sealed	Yes	Yes	Yes	Yes	Yes
Addenda acknowledged	Yes	Yes	Yes	Yes	Yes
Other	Yes	Yes	Yes	Yes	Yes
Other	Yes	Yes	Yes	Yes	Yes
Point rated requirements included	Yes	Yes	Yes	Yes	Yes
Mandatory Requirements Met? *If pass, continue to next tab.* *If Fail, Stop evaluation.*	**Pass**	**Pass**	**Pass**	**Pass**	**Pass**
Point Rated Submission:					
Part I *(Min 75% required in each category/overall)*					
Company Profile, Experience, References	12/15	14/15	/15	/15	/15
Audit and Design Approach	12/15	13.5/15	/15	/15	/15
Financial Background & Warranty	7/10	9/10	/10	/10	/10
Luminaire Performance & Quality (Total Cost of Ownership)	21/25	24/25	/25	/25	/25
Project Plan & Timelines	18/20	16/20	/20	/20	/20
Value Added Components	7/10	8/10	/10	/10	/10
Overall Proposal Quality	4/5	4.5/5	/5	/5	/5
Subtotal Part I (minimum 75 required)	**81/100**	**89/100**	**0/100**	**0/100**	**0/100**
(If all cells are green, continue to Part 2 for bidder)					
Part II Proposed Cost	1,850,000	2,000,000			
VALUE POINTS PER $100K	**4.3784**	**4.4500**			

RECOMMENDED SOURCES

Asner, , ***The Request for Proposal Handbook*** 5th Edition (2014) Vancouver, Canada. www.rfpmentor.com

Design Lights Consortium, ***Qualified Products List:*** www.designlights.org/QPL

Lightsavers Canada, ***Model Technical Specifications for Procurement of LED Luminaires in Canada.*** Version 2.0 (2015) Toronto, Ontario. www.lightsavers.ca

Metropolitan Area Planning Council (MAPC), ***Guide to Retrofit Streetlights with LEDs*** (2014) Boston, Massachusetts.

Municipal Solid State Lighting Consortium (MSSLC), ***Model Specification for LED Roadway Luminaires,*** Version 2.0 (2014) U.S. Department of Energy: www1.eere.energy.gov

NIGP Business Council (2016), ***Total Cost of Ownership: Realizing Procurement's Full Potential in Value Creation.*** NIGP White Paper, Herndon, VA.

NIGP Business Council (2014), ***EVERYBODY WINS: Crafting a Solicitation that Fosters Transparency, Best Value, and Collaborative Partnership.*** NIGP White Paper, Herndon, VA.

NIGP Public Procurement Practice (2012), ***The Evaluation Process.*** NIGP Principles and Practices of Public Procurement, Herndon, VA.

NIGP Public Procurement Practice (2012), ***Sustainable Procurement Practice.*** NIGP Principles and Practices of Public Procurement, Herndon, VA.

State of Arizona, State Procurement Office, ***Guide to Preparing a Statement of Work.*** https://goo.gl/MMG0ik

State of Massachusetts Executive Office of Administration and Finance, ***Guidelines for Ensuring Best Value Procurement*** www.mass.gov/portal

Walton, Innocenti, Lucas, Robertson, and Parker, Best Value in Government Procurement, (2013) ***Best Value in Government Procurement Concepts and Practices.*** NIGP Position Paper, Herndon, VA.

U.S. Department of Energy, ***Outdoor Lighting Challenges and Solution Pathways*** (2016) www.betterbuildingssolutioncenter.energy.gov

EDUCATIONAL PROVIDERS

California Association of Public Procurement Officials, Inc. (CAPPO): www.cappo.org

Canadian Public Procurement Council (CPPC): www.cppc-ccmpa.ca

Institute for Supply Management (ISM): www.ism.ws

National Association of Educational Procurement (NAEP): www.naepnet.org

National Association of State Procurement Officials: www.naspo.org

National Contract Management Association (NCMA): www.ncmahq.org

National Institute of Governmental Purchasing: www.nigp.org

National Procurement Institute (NPI): www.npiconnection.org

Supply Chain Management Association (SCMA): www.scma.com

Universal Public Procurement Certification Council (UPPCC): www.uppcc.org