



SMART ENERGY PROVIDER

American Public Power Association

Application Guide



Powering Strong Communities

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About the Association

The American Public Power Association (the Association) is the voice of not-for-profit, community-owned utilities that power 2,000 towns and cities nationwide. We represent public power before the federal government to protect the interests of the more than 49 million customers that public power utilities serve, and the 93,000 people they employ. Our association advocates and advises on electricity policy, technology, trends, training, and operations. Our members strengthen their communities by providing superior service, engaging citizens, and instilling pride in community-owned power.

Purpose of this Guide

This guide serves as a resource on the intent, spirit, and associated scoring guidelines for each of the questions within the Smart Energy Provider (SEP) program application. Each application received is thoroughly reviewed by an expert panel of public power representatives. This guide includes information on what the panel is evaluating in each question, along with a clear breakdown of the point value associated with each possible response. **Criteria for grading these questions are established based on leading industry practices.** Throughout the grading process, each section will be reviewed, scored, and verified by several panel members. Many questions will not require attachments. For some questions, applicants may choose to include additional documentation, but attachments are not expected.

This guide is meant to increase transparency of the panel's grading expectations and help utilities better understand the application grading process. Please note that the guide is meant to be a suggestive, not prescriptive, resource.

Each question in the application has been explained in detail, and a scoring rubric has been provided. While the scoring rubric can serve as a general guide for what utilities should expect, **the ultimate scoring determinations are made exclusively by the panel. If the panel sees opportunities for improvement in any specific area, fewer points may be awarded.** The SEP application process should be viewed by utilities as an opportunity for coaching and feedback from industry experts.

Smart Energy Provider Program Overview

The *Smart Energy Provider (SEP) program* is a new best practices designation that provides national recognition to utilities for the work they are doing in the following four disciplines:

- Smart Energy Information
- Energy Efficiency and Distributed Energy Resources
- Environmental and Sustainability Programs/Initiatives
- Communication/Education and Customer Experience

Smart Energy in the context of this application program encompasses the areas of energy efficiency, distributed generation, renewable energy, and environmental initiatives conducted by a utility as part of efforts to provide low-cost, quality, safe, and reliable electric service.

The purpose of the Smart Energy Provider program is to evaluate utility efforts to incorporate efficiencies in the provision of electric service; help public power utilities benchmark their work against others in the industry; and provide a vehicle for peer evaluation based on a set of industry best practices.

In the SEP program, applicants earn points for their practices and accomplishments in each of the three disciplines. **Criteria posed as questions within each discipline are based on leading best practices and are intended to represent a utility-wide commitment to energy efficiency, distributed energy resources, environmental and sustainability programs, and customer communication and education.** A list of the specific scoring criteria is provided in the following sections and summarized in the back of this manual. All information that is submitted by utilities during the SEP application process will be kept confidential to the SEP Review Panel and Association staff.

Becoming a Smart Energy Provider: Application Process Overview

Application Period

Each year, the SEP application period opens for submissions in **December** and closes by **May 15**.

Applications are reviewed by the SEP Review Panel, which is comprised of public power employees from across the country. Based on the information provided in a utility's completed application, utilities may be recognized as a Smart Energy Provider.

1. December – Spring: Utilities complete application (Application due May 15th)
2. Summer: SEP panel conducts application reviews
3. Early November: Designation released at Customer Connections Conference
4. Next Two years (Nov – Nov): Utilities maintain designation and promote recognition
5. November – May 15th: Utilities reapply for designation

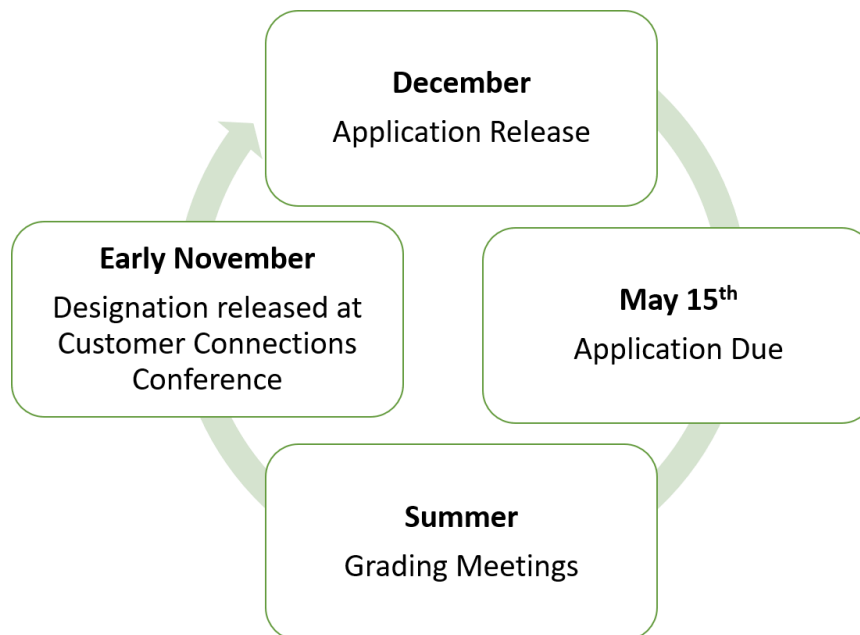


Figure 1: Application cycle

SEP Utility Size Categories

- Small Utility: Under 5,000 Customers
- Medium Utility: 5,000 – 30,000 Customers
- Large Utility: Over 30,000 Customers

Designation

Designation as a Smart Energy Provider is pass or fail. Designation is awarded to the utility if its application received a total score of 70 or higher.

Designation Period

Beginning with the 2019 designees, SEP designations last for two years (e.g., utilities that apply in 2018-2019 and receive an SEP designation in November 2019 will maintain that designation until November 2021. The utility will need to reapply in 2020 to maintain its designation after 2021. Utilities that wish to maintain their SEP status must reapply every two years. The intent of the re-application process is to ensure SEP utilities are consistently striving to maintain and improve the quality of their system.

Requests for Information

While reviewing applications during the initial screening meeting, held in the early spring or the summer after applications have been submitted, the SEP Review Panel may issue Requests for Information, or RFIs. **RFIs are issued when the panel is unable to determine a grade based on the information provided. If “No” was indicated as the response, an RFI may not be issued. RFIs are not necessarily issued for any question that receives less than full points, but only when the panel needs clarification on any responses.**

Scoring Information

How Points Are Allocated Among the Four Sections

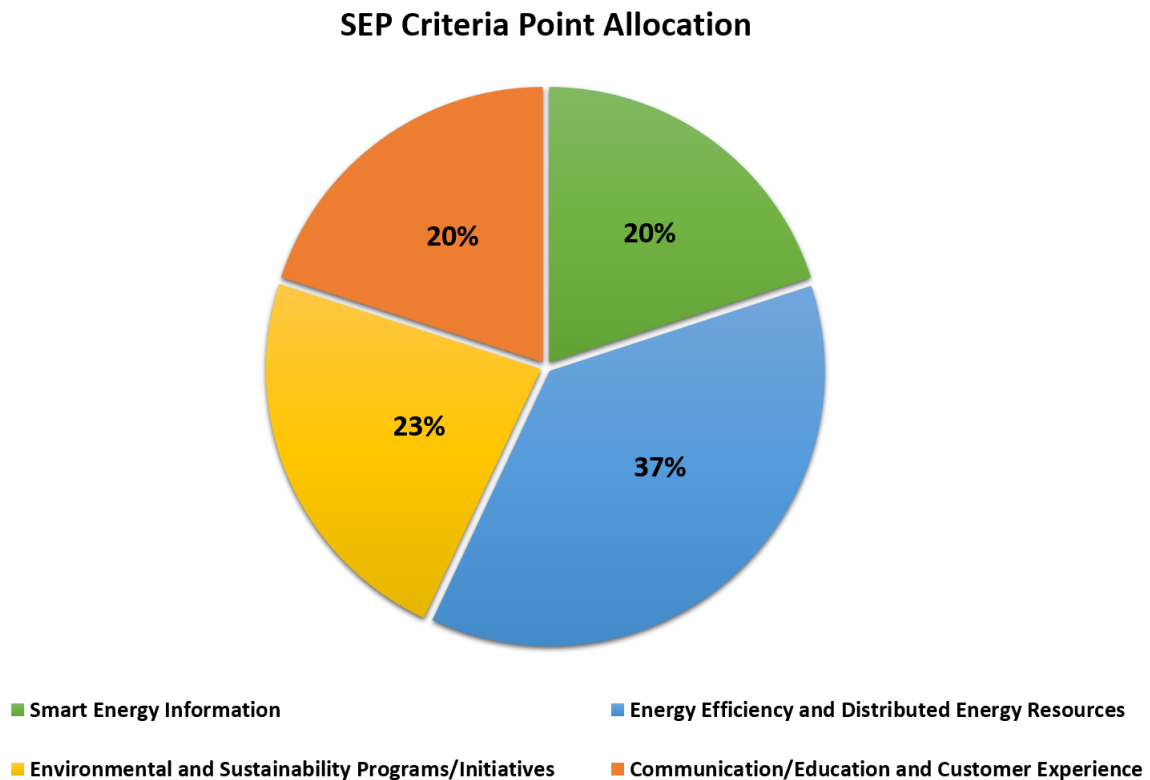


Figure 2: Percentage allocation of points by section

SEP Review Panel

Each application received is thoroughly reviewed by an expert panel of public power representatives.

More information on the SEP Review Panel can be found at www.PublicPower.org/SEP.

Figure 3: Sample Scoring Guidelines, yes or no question

Application Question			Maximum Points Possible
Possible Responses to Question	Smart Energy Goals and Objectives	Points (maximum = 8)	Points Associated with Response
	Yes	8	
	No	0	

The complexity of the question will impact the scoring guidelines. While some questions will be graded on a yes or no basis, others will require a more in-depth evaluation by the SEP Review Panel. In instances where there are multiple boxes to select, partial points are awarded based on the number of boxes checked. Where applicable and possible, these partial breakdowns of points have been presented. While the scoring rubric can serve as a general guide for what utilities should expect, the **ultimate scoring determinations are made exclusively by the panel. If the panel sees opportunities for improvement in any specific area, fewer points may be awarded.**

Figure 4: Sample Scoring Guidelines, multi-options question

		Maximum Points Possible for Question	
Possible Number of Boxes Checked	Research and Development	Points (maximum = 5)*	Points Associated with Response
	2 boxes or more checked	5	
	1 box checked	3	
	No, 0 box checked	0	

Utility Information and SEP Application Payment

Starting the Application Process

Prior to gaining access to the SEP application, applicants must submit a [registration form](#). The Association's Engineering Services staff uses this information to create a utility profile in the online application system. In addition, the form asks for a primary contact for the utility. This individual will be contacted with any questions the SEP Review Panel or Engineering Services staff may have concerning the application. All correspondence relating to the application will also be sent to this individual.

Payment

Utilities must submit an online payment form (see [website](#)) to pay the application fee. This fee partially covers the costs associated with processing, examining, and scoring all submissions. This fee must be paid each time you apply for SEP status. The fee structure is dependent on the number of customers your utility serves. The application fee is not refundable if the SEP criteria are not met. However, if your utility does not receive the SEP designation for any reason, you may re-apply the year immediately following your initial application without paying the application fee again. You may pay the fee online, by check, by credit card, or you can request that the Association bill your utility directly¹ (Association members only for this option).

Table 1: Payment Breakdown

Total Customer Size	Payment
Small (Under 5,000 customers)	\$250
Medium (5,000-30,000 customers)	\$500
Large (Over 30,000 customers)	\$750
Non-APPA Member	\$2250

Additional Utility Information

¹ Please note the Association's policy: utilities that request to be billed directly will be charged a processing fee of \$10.00.

You can provide additional details about your utility in the first question of the SEP application, which asks for utility employee demographics. This information is used as a reference point during the assessment of your SEP application. The number of employees must be filled out to the best of your ability. Note that it is helpful for the SEP Panel to understand the employee breakdown of your system, but this information will not be scored.

Smart Energy Information (I)

The following is a sequential, question-by-question review of the SEP application's Overarching Program Information section. Each question in this section is explained, and the scoring rubric is outlined.

Goals and Objectives (A1)

The SEP Review Panel believes it is important for a utility to define its smart energy goals and objectives. In the context of this application, this means engaging in planning to achieve the community desired level of proficiency in the areas of energy efficiency, distributed generation, renewable energy, and environmental initiatives as part of efforts to provide low-cost, quality, safe, and reliable electric service.

There are many ways a utility can demonstrate that it has smart energy goals, objectives, or plans in place, and might include:

- Written plans for implementing supply-side energy efficiency programs, demand-side efficiency programs, distributed generation programs, or initiatives that encourage customers to help the utility in achieving its energy goals
- Written plans for implementing sustainability or environmental programs

Please describe and/or attach description, supporting materials, examples, or documentation of smart energy goals, objectives, or plans to receive the full 6 points for the first part of the question. Two points can be earned if a utility has goals, objectives, and/or plans reflected in their resource planning.

Smart Energy Goals and Objectives	Points (maximum = 8)
Yes, with description/attachment	6
No	0
Smart Energy Goals and Objectives in Resource Planning	
Yes	2
No	0

Note: Please enter 'N/A' in the text box if you opt NOT to provide a description.

Research and Development (A2)

Research and development at public power utilities is an essential investment, and utilities can take a leadership role by pursuing cutting-edge technology and innovation as an integral part of energy delivery. Utilities can invest in research and development by being a member of a utility-specific research program, such as the Electric Power Research Institute (EPRI) and/or the Association's Demonstration of Energy and Efficiency Developments (DEED). Another mechanism would be a utility's direct participation in R&D, which may include applying for grants and/or scholarships or implementing research and development. Through research, development, and demonstration of new ideas, utilities can increase efficiency, reduce costs, investigate new and better technologies and services, and improve processes and practices to better serve customers. For more information on various research and development programs, visit the following websites:

- [DEED](#)
- [EPRI](#)
- [The Department of Energy\(DOE\)](#)
- [Environmental Protection Agency\(EPA\)](#)

State and regional programs are unique to your utility's location. Check with your state association or joint action agency within your region to discover what R&D opportunities there may be for your utility.

Research and Development	Points (maximum = 5)
2 boxes or more checked	5
1 box checked	3
No, 0 boxes checked	0

Financing Options (A3)

To encourage customers to participate in smart energy programs, utilities should offer financing options such as on-bill financing, Property Assessed Clean Energy (PACE), low interest loans, or interlocal financing.

On-bill lending options allow customers to finance energy efficiency improvements by having the utility absorb the upfront cost of energy upgrades. Customers repay the utility through a charge on their monthly utility bill. PACE programs are similar to on-bill financing programs in that utilities put forth the initial capital for energy improvement projects. Instead of improvement costs being tied to the property owner, PACE improvements are tied to the property and repayment obligations can transfer with property ownership.

A utility should describe and/or attach supporting materials, examples, or documentation of any financing options that it provides and indicate what percentage of eligible customers participate. Please make a note that this question is asking for financing options that have been tested, piloted, or offered, if they have actually evaluated, during the designation period, which is two years.

Financing Options	Points (maximum = 3)
Yes	3
No	0

Note: Please enter 'N/A' in the text box if you opt NOT to provide a description.

Benchmarking (A4)

Utilities should collect and analyze data on the effectiveness of their energy efficiency, distributed energy resources, and sustainability programs, in addition to assessing customer satisfaction.

Benchmarking not only provides opportunities for utilities to reflect on the performance of their programs, but also provides a platform for utilities to compare their programs with peers. Utilities should indicate if they compare their benchmarking and performance data with other utilities and organizations, how often data is compared, and who conducts evaluations.

Benchmarking	Points (maximum = 4)
Yes	1
No	0
Program Areas	

3 or more types of program areas	1
2 types of program areas	0.75
1 type of program areas	0.5
Data Comparison Frequency	
Yearly	1
Every 2-3 years	0.5
More than 3 years	0
Evaluation	
Internal staff or independent third party	1

Energy Efficiency and Distributed Energy Resources (II)

The following is a sequential, question-by-question review of the SEP application's Energy Efficiency and Distributed Energy Resources section. Each question in this section is explained, and the scoring rubric is outlined.

Supply-side Programs (B1)

By implementing supply-side programs, utilities can focus on improving the efficiency and performance of existing generation, distribution, and transmission systems. There are several ways utilities can improve supply-side efficiency, which include upgrading conductors, transformers, and providing VAR support for capacitor banks.

Supply-side Programs	Points (maximum = 4)
3 boxes or more checked	4
2 boxes checked	3
1 box checked	2
0 boxes checked	0

Demand Response Programs (B2)

Demand Response (DR) programs are designed to encourage customers to reduce their energy consumption in response to changes in the electricity price over time, or to triggers from system conditions or economics (e.g., a spike in electricity price). Often, behavioral demand response programs implement pricing structures where the cost of electricity is higher when there is higher customer demand. Load management programs can vary in implementation. Some might offer incentives to customers for turning off appliances whereas others might have customers agree to installing automated load control systems in their home.

For each demand response program that your utility implements, please describe and/or attach supporting materials, examples, or documentation of your financial incentives/rebates.

If the question does not apply to your utility, please describe and/or attach supporting materials, examples, or documentation of why it does not apply to your utility.

Demand Response Programs	Points (maximum = 4)
4 boxes checked	4
3 boxes checked	3
2 boxes checked	2
1 box checked	1
0 boxes checked	0

Note: Please enter 'N/A' in the text box if you opt NOT to provide a description.

Demand-side Energy Efficiency Programs (B3)

Demand-side energy efficiency programs target more permanent changes to electricity usage patterns by either installing or replacing more efficient and effective electric appliances. Helping residential and commercial customers improve the efficiency of their homes and businesses can be an effective way for a utility to improve its ability to reduce energy costs and peak demand. Utilities can provide rebates to support customers in buying energy efficient appliances. They can also provide incentives for customers to invest in retro commissioning and building retrofits.

Utilities should check the energy efficiency programs it currently provides and offer a description and/or attach supporting materials, examples, or documentation of financial incentives/rebates. If the question does not apply to your utility, please describe and/or attach supporting materials, examples, or documentation of why it does not apply to your utility.

Demand-side Energy Efficiency Program	Points (maximum = 8)
8 boxes or more checked	8
7 boxes checked	7
6 boxes checked	6

5 boxes checked	5
4 boxes checked	4
3 boxes checked	3
2 boxes checked	2
1 box checked	1
0 boxes checked	0

Note: Please enter 'N/A' in the text box if you opt NOT to provide a description.

Customer Reach (B4)

Utilities should make sure that their energy savings programs target a wide range of customers, including residential, commercial, and industrial areas. This question is particularly asking about any hard-to-reach segments or high bill customers. An example of an energy savings program that targets hard-to-reach customers is weatherization that allows low-income residents to reduce their energy consumption by installing more energy-efficient measures in their homes.

Customer Reach	Points (maximum = 5)
3 boxes or more checked	5
2 boxes checked	3
1 box checked	1
0 boxes checked	0

Electric Vehicle Programs (B5)

The growth of electric vehicle sales creates new opportunities for utilities that are providing the electricity needed to power these vehicles. Utilities can bolster electric vehicle use by building new charging stations, providing rebates and incentives for residential and commercial charging stations, and providing electric vehicle education and outreach.

Utilities should check all the electrical vehicle programs it currently provides.

Electric Vehicle Programs	Points (maximum = 4)
3 or more boxes checked	4
2 boxes checked	3
1 box checked	2
0 boxes checked	0

Note: Please enter 'N/A' in the text box if you opt NOT to provide a description.

Note: "Other" checkbox may be counted as multiple boxes checked if multiple items are listed.

Battery Storage Programs (B6)

Energy storage technology has the potential to allow utilities to optimize their assets and energy use without investing in new infrastructure. Batteries currently dominate industry discussions around energy storage due to the growing capabilities of lithium-ion batteries. There are many battery storage programs and initiatives utilities can provide to customers. Battery storage rebates can incentivize customers with solar panel systems to install home batteries that will store their excess solar power. Battery lease programs allow customers to lease batteries for their homes and electric vehicles. Some utilities may provide a standard battery interconnection agreement to enable battery generating or storage infrastructure for their customers. Utilities should check all the battery storage programs and initiatives it currently offers.

Battery Storage Programs	Points (maximum = 4)
4 boxes or more checked	4
3 boxes checked	3
2 boxes checked	2
1 box checked	1
0 boxes checked	0

Note: “Other” checkbox may be counted as multiple boxes checked if multiple items are listed.

Distributed Generation Programs (B7)

Distributed generation utilizes small-scale technologies to produce electricity close to the end user.

Distributed generation systems such as solar panels, small wind turbines, and natural gas fuel cells provide customers with cleaner and more reliable power on site. Utilities may offer fuel cell or renewable energy incentives to reduce energy consumption required to meet the electricity demand. Renewable energy-based, or fuel cell incentives are designed to reduce customers’ energy costs when they meet or exceed specific energy reduction standards set by the utilities.

Utilities should check all the distributed generation programs it currently offers.

Distributed Generation Programs	Points (maximum = 8)
3 boxes or more checked	8
2 boxes or more checked	6
1 box checked	4
0 boxes checked	0

Note: “Other” checkbox may be counted as multiple boxes checked if multiple items are listed.

Environmental and Sustainability Programs/Initiatives (III)

The following is a sequential, question-by-question review of the SEP application's Environmental and Sustainability Programs/Initiatives Section. Each question in this section is explained, and the scoring rubric is outlined.

Sustainability Programs (C1)

Sustainability programs offer utilities a method of analyzing their performance in reducing impacts to the environment. Utilities often implement these programs to follow through with the proper balance of commitments to economy, environment, and the community for their operations. Major environmental/sustainability programs include:

- Renewable energy supply acquisition program (utility)
- Landscaping/tree planting program
- Sustainability reporting
- Informational/educational program
- Waste program
- Voluntary green pricing

Through these programs, utilities may set sustainability goals, track use of energy resources, assess performance, develop sustainable improvements to operation systems, and/or publish an annual report on the findings.

Sustainability Programs	Points (maximum = 7)
3 boxes or more checked	7
2 boxes checked	5
1 box checked	3
0 boxes checked	0

Note: “Other” checkbox may be counted as multiple boxes checked if multiple items are listed.

Community Collaboration (C2)

The electric utility should collaborate with other municipal departments or utilities to improve overall environmental performance within its community. Collaboration increases local participation in utilities’ sustainability programs and initiatives by allowing for joint implementation, marketing, and funding efforts. An example of collaboration that creates efficiency includes coordinating multiple utilities in infrastructure upgrade and repair efforts.

Utilities should describe and/or attach supporting materials, examples, or documentation of their collaboration(s) with other community-operated departments.

Community Collaboration	Points (maximum = 4)
Yes	4
No	0

Note: Please enter ‘N/A’ in the text box if you opt NOT to provide a description.

Electrification (C3)

Electrification is about replacing the power source for items from a fuel such as gas with electricity. With the deployment of electric heat pumps, electric vehicles, fuel switching, and other electronic technologies, electrifying end use energy could increase environmental efficiency and reduce overall emissions. Promoting electrification initiatives or programs might also improve the use of utilities’ assets by reducing overall energy and operating costs for customers. Examples of promotions of electrification on the customer side include: forklifts, clothes dryers, and ovens.

Utilities should describe and/or attach supporting materials, examples, or documentation of any electrification initiatives that they provide to the customers and why they have them.

Electrification	Points (maximum = 4)
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Yes	4
No	0

Note: Please enter 'N/A' in the text box if you opt NOT to provide a description.

Emissions Tracking (C4)

By keeping track of greenhouse gas emissions, utilities can assess the emission footprint associated with their energy supply and communicate this information to their communities.

Utilities should describe and/or attach supporting materials, examples, or documentation of their emission tracking analytical methods and also the average greenhouse gas emissions in CO₂ lbs per MWh from their energy supply for the last year. Applicants should list any local, national, or international groups to whom they submit their emissions reports (e.g., EPA).

Emission Tracking	Points (maximum = 4)
Yes	4
No	0

Note: Please enter 'N/A' in the text box if you opt NOT to provide a description.

Emission Savings (C5)

Utilities should track emission savings from their smart energy programs. Tracking emission savings provides utilities a valuable metric that can inform customers and other stakeholders about the emission benefits of smart energy programs.

Utilities should describe and/or attach supporting materials, examples, or documentation of one or more types of analysis used to evaluate GHG emission savings.

Emission Savings	Points (maximum = 4)
Yes	4
No	0

Note: Please enter 'N/A' in the text box if you opt NOT to provide a description.

Communication/Education and Customer Experience (IV)

The following is a sequential, question-by-question review of the SEP application's Communication/Education and Customer Experience section. Each question in this section is explained, and the scoring rubric is outlined.

Stakeholder Engagement (D1)

Stakeholder engagement is a key part of planning and developing smart energy programs. Your utility should engage internal and/or external stakeholders to investigate what social and environmental issues they consider to be most important to inform utility decisions.

Utilities should describe and/or attach supporting materials, examples, or documentation of how they engage internal/external stakeholders in developing "smart energy" goals and/or plans.

Stakeholder Engagement	Points (maximum = 5)
Yes	5
No	0

Note: Please enter 'N/A' in the text box if you opt NOT to provide a description.

Communication (D2)

A utility should communicate its policy, procedures, and programs with the community it serves. Suggested groups could include, but are not limited to, governing boards/elected officials, customers, staff, civic groups, schools, and homeowners associations (HOAs). Utilities should check all the communication methods it currently uses and which community groups it engages.

Communication	Points (maximum = 4)
---------------	----------------------

Yes	1
No	0
Type of Communication Efforts	
2 types of effort	1
1 type of efforts	0.5
Types of Groups engaged	
2 boxes or more checked	1
1 box checked	0.5
Methods used	
2 boxes or more checked	1
1 box checked	0.5

Customer Satisfaction (D3)

A utility should evaluate customer satisfaction for all of its smart energy programs to ensure programs are meeting customer needs and expectations. Customer feedback surveys are one way to gauge customer satisfaction and collect information that can be used to improve customer experience. A utility should describe and/or attach supporting materials, examples, or documentation of one or more methods it uses to collect and evaluate customer satisfaction.

Customer Satisfaction	Points (maximum = 6)
Yes	6
No	0

Note: Please enter 'N/A' in the text box if you opt NOT to provide a description.

CSR Training (D4)

Customer Service Representatives (CSRs) directly interact with customers every day, and it is important that CSRs are well-trained and knowledgeable about customers' behavioral response to smart energy programs, whether on the demand or supply side. CSRs mainly oversee billing or payments, but CSRs can also be any operations or management level employees, as long as they interact with customers. A utility should offer CSRs training to different types of customer bill and other responses in order to improve its customers' experience in these programs.

Utilities should describe and/or attach supporting materials, examples, or documentation of one or more examples of CSR training that they offer, if they answer yes.

CSR Training	Points (maximum = 5)
Yes	5
No	0

Note: Please enter 'N/A' in the text box if you opt NOT to provide a description.

Scoring Criteria Summary

Section	Question	Subject of Question	Maximum Point Value
Smart Energy Information	A1	Goals and Objectives	8
	A2	Research and Development	5
	A3	Financing Options	3
	A4	Benchmarking	4
Energy Efficiency and Distributed Energy Resources	B1	Supply-side Programs	4
	B2	Demand Response Programs	4
	B3	Demand-side Energy Efficiency Programs	8
	B4	Customer Reach	5
	B5	Electric Vehicle Programs	4
	B6	Battery Storage Programs	4
	B7	Distributed Generation Programs	8
Environmental and Sustainability Programs/Initiatives	C1	Sustainability Programs	7
	C2	Community Collaboration	4
	C3	Electrification	4
	C4	Emission Tracking	4
	C5	Emission Savings	4
Communication/ Education and Customer Experience	D1	Stakeholder Engagement	5
	D2	Communication	4
	D3	Customer Satisfaction	6
	D4	CSR Training	5