

Certification Maintenance and Recertification Guidance

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INTRODUCTION

PEER Certification was designed to recognize industry leaders for improving efficiency, dayto-day reliability and overall resiliency of power systems and electrical infrastructure. PEER was developed as a leadership standard to drive market transformation in the power and energy sectors. However, leadership is not confined to the moment of certification. All PEER projects can continue to demonstrate leadership long after the initial certification. Recertification recognizes project teams that monitor performance, make improvements and demonstrate that their microgrids, power systems and electrical infrastructure are performing in a resilient and reliable manner.

This PEER Certification Maintenance and Recertification guidance was developed to provide information and policies for maintaining and recertifying PEER projects. Project teams (and others) can use this document to understand how to keep their certification current, and when and how to recertify. This document should be used in conjunction with the most current version of the PEER rating system.

ANNUAL CERTIFICATION MAINTENANCE

To maintain certification, PEER projects are required to annually submit their most recent performance data (Reliability, Resiliency, Environment, and Demand Management). This information is due by the anniversary date of certification each year. Each project will receive a reminder to submit completed <u>workbooks</u> in advance of this date from the GBCI Certification team. While no additional documentation or verification will be required, GBCI reserves the right to conduct an audit and request additional documentation.

- Projects that submit information annually will have their registration fee waived off for all future recertifications.
- Projects that do not submit data annually will be required to pay a registration fee to proceed with recertification (see the "Recertification" section below).

CERTIFICATION VALIDITY

In addition to annual certification maintenance requirements, projects are required to recertify every three years to keep their PEER certification valid. Policies on when the certification expires and how to maintain certification will differ based on the version that was used to certify the project.

Projects certified or pursuing certification under PEER v2

PEER certification remains valid for three years. Projects maintain their certification by complying with the annual maintenance requirements, as stipulated in the preceding section, and by recertifying every three years following the process outlined in the following section. Projects that do not provide annual data for three consecutive years and do not recertify at the three-year anniversary will no longer be considered certified. The project will be required to recertify by following the process and fees outlined in the following section.

Projects certified under PEER v1 & v1.1

There is no validity period for projects registered and certified under PEERv1 and v1.1. However, previously certified PEER v1 and v1.1 projects are encouraged to pursue recertification to raise the bar to achieve a higher level of certification (Silver, Gold or Platinum) and compete with their peers in the market. Projects will be required to recertify by following the process and fees outlined in the following section.

RECERTIFICATION

PEER Recertification is available to all PEER certified projects (certified under v1, v1.1 or v2) under the following options:

- every three years to maintain certification
- to reinstate a certification that is no longer valid
- to upgrade certification from v1, or v1.1 to v2

Recertification is available for all project types including Campus, Cities & Utilities, and Transit. A PEER Project cannot change the project type and must recertify with the same project type chosen under earlier version. Recertification process is same as outlined in the PEER Guide to Certification with some key differences outlined below.

Registration

For all types of recertification, register your project by sending an email to peer@gbci.org, sign the certification agreement, and pay the applicable fees. GBCI will waive the registration fee for any recertification project that has maintained and provided data in the years following certification. Please visit the <u>PEER website</u> or contact GBCI for more information on recertification fees.

Requirements and process

 Recertification to maintain certification status – previously certified PEER v2 projects that have reached the end of their three year validity term and previously certified PEER v2 projects that have not maintained validity and want to recertify to reinstate certification (see "Certification Validity" section above)

After registration, projects will be required to provide annual performance data (as outlined in the Performance Pathway requirements in Appendix 1) and achieve a minimum of 40 points from the available 100 points, to be recertified. An updated scorecard and corresponding level of certification will be provided. Note the following:

- Projects must provide annual performance data for the most recent 12 months.
- Projects may apply for additional base credits (listed in Appendix 1).

Submittal Requirements:

• Provide completed <u>PEER v2 Annual Certification Maintenance Reporting Workbook</u> along with supporting documents identified.

- If applying for additional base credits, provide documentation demonstrating compliance with the credits as outlined in the PEER Rating System and Reference Guide.
- 2. Recertifying to upgrade certification version previously certified PEER v1 or v1.1 projects that would like to recertify under PEER v2.

Previously certified v1 or v1.1 projects must recertify their project to PEER v2. Upgrading to a new version will enable projects to engage in a cycle of continuous performance monitoring, address any gaps in the systems, benchmark against previous certification, track project performance with current industry standards, and provide an opportunity to improve grid infrastructure performance with new credits and thresholds. There are two options available for projects to upgrade to new version.

Option 1 - Performance Pathway:

Previously certified v1 or v1.1 projects may recertify to v2 by demonstrating compliance with certain v2 prerequisites and providing the required data as outlined in the Performance Pathway requirements in Appendix 1. Projects must achieve a minimum of 40 points from the available 100 points to be recertified. An updated scorecard and corresponding level of certification will be provided based on v2 certification thresholds.

- Project must comply with the following five Prerequisites
 - RR prerequisite: Reliability Performance Monitoring
 - EE prerequisite: Environmental Performance Disclosure.
 - EE prerequisite: System Energy Efficiency Coefficient Disclosure.
 - OP prerequisite: Triple-Bottom-Line Analysis
 - GS Prerequisite: Customer and Load Survey
- Projects may apply for additional base credits (as indicated in Appendix 1).

Submittal Requirements:

- Provide completed <u>PEER v2 Annual Certification Maintenance Reporting</u> <u>Workbook</u> along with supporting documents
- Provide documentation demonstrating compliance with the five prerequisites
- If applying for additional base credits, provide documentation demonstrating compliance with credits as outlined in the PEER Rating System and Reference Guide.

Option 2 - Streamlined Documentation Pathway:

Previously certified v1 or v1.1 projects may recertify to v2 by providing documentation for applicable prerequisites and credits that are unique to v2 and/or have not been previously shared in the v1 or v1.1 submittal. Refer to Appendix 2 'Technical Guidance for projects upgrading from v1 or v1.1 to v2' for more details on key changes between v1 or v1.1 and v2 and credit specific technical guidance. Projects must achieve a minimum of 40 points from the available 110 points to be recertified. An updated scorecard and corresponding level of certification will be provided.

Submittal Requirements:

• Provide documents and completed workbooks as outlined in Appendix 2.

Appendix 1: Performance Pathway for Recertification

This pathway is available to v2 projects that are recertifying to maintain/reinstate certification status or v1 or v1.1 projects that are upgrading to v2 using the Performance Pathway option.

Performance of the projects will be evaluated across four different parameters for a maximum of 100 points

- 1. Reliability: 1-26 Points
- 2. Resiliency: 1-28 Points
- 3. Environment: 1-20 Points
- 4. Demand Management: 1-16 Points
- 5. Base Credits: 1-10 Points

Project teams must complete the <u>PEER v2 Annual Certification Maintenance Reporting</u> <u>Workbook</u> to provide data for each of these parameters. Data input requirements for each parameter are defined below:

Reliability: (1-26 Points)

Data required for assessing the Reliability Performance

- 1. SAIFI (system average interruption frequency index)
- 2. SAIDI (system average interruption duration index)

Resiliency: (1-28 Points)

Data required for assessing the Resiliency Performance

- 1. Total Project Load (Connected load)
- 2. Capacity of backup power supply from the Alternate Bulk Grid (Supplied from the alternate substation) MW
- 3. Capacity of backup power supply from local generation (Supplied from the onsite fossil fuel-based local generation, and Onsite Renewables) MVA/kVA/MW
- 4. Type of Energy Storage systems- (e.g. Grid Scale battery, flywheel)
- 5. Capacity of backup power supply from the energy storage system MW

Environment: (1-20 Points)

Data required for assessing the Environment Performance

- 1. Utility Name For the utility Energy Mix
- 2. Total Annual Consumption (MWh)
- 3. Local Renewables type Solar, Wind, Biomass
- 4. Local Renewable Generation (MWh)
- 5. Green power purchased (through PPA) MWh
- 6. Type of local generation- (CHP, Diesel Generator)
- 7. Local Generation (MWh)

Demand Management: (1-16 Points)

Data required for assessing the Demand Management Performance

1. Peak Demand – MW

Base Credits: (1-10 Points)

In addition, project teams may choose any or all the credits listed below.

- EE credit: Environmental impact disclosure and management
- OP credit: Safety review process
- GS credit: Customer Engagement (Only for Cities & Utilities)
- o GS credit: Data Privacy and Cybersecurity
- GS credit: Supply Choice

Appendix 2: Technical Guidance for projects upgrading from v1 or v1.1 to v2

Key Changes from PEER v1 or v1.1 to PEER v2

The following describes the key changes between PEER v1 or v1.1 and v2 rating systems

- Some credits have been consolidated
- A few credits have been removed
- New credits based on market needs were added
- Many credits now have clear thresholds
- Exemplary points under Innovation have been added and Regional priorities have been identified
- Certification levels have been introduced similar to the LEED rating system
- Scoring has been revised to 110 points in total similar to the LEED rating system.

Scoring and Certification Levels

Scoring

The scoring will be based on current PEER v2 methodology. Points will be awarded considering the v1 or v1.1 document (for credits, where no change is made, and no additional data is required from project team) and v2 (for new credits, minor & major changes) additional data submitted.

Certification levels

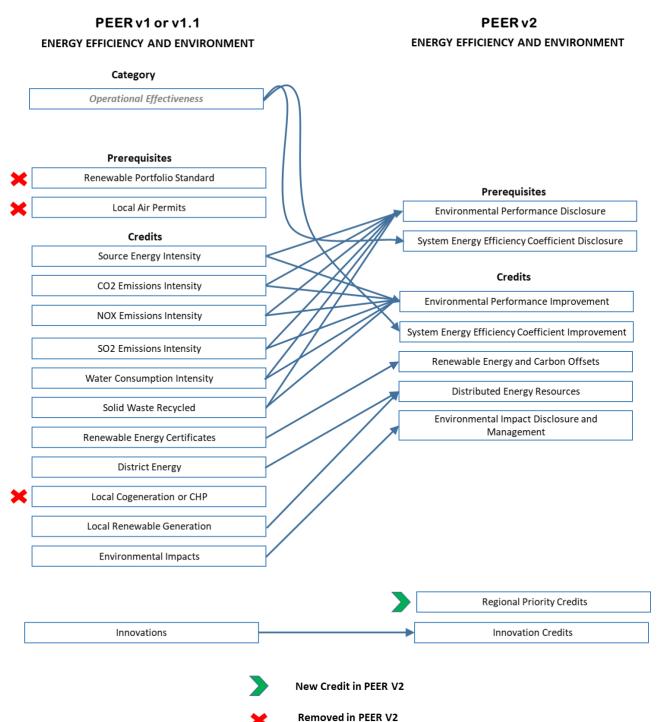
CERTIFICATION LEVELS	MINIMUM POINTS REQUIRED
Platinum	80+ points
Gold	60-79 points
Silver	50-59 points
Certified	40-49 points

Credit category changes from PEER v1 or v1.1 to v2

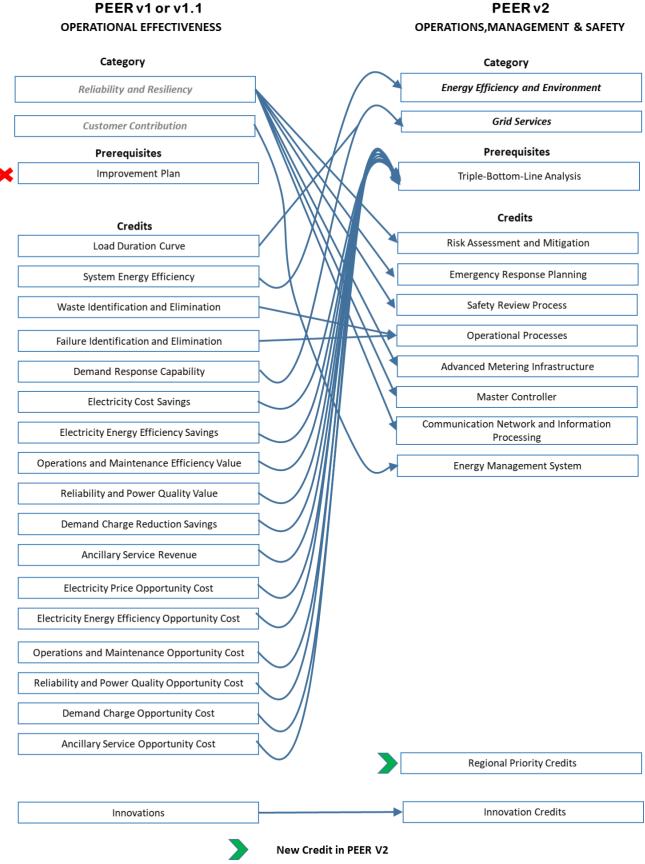
The diagrams below reflect the changes made to v1 or v1.1 credits and how they have been grouped and represented under v2 along with new credits.

PEER v1 or v1.1 RELIABILITY AND RESILIENCY Prerequisites		PEER v2 RELIABILITY AND RESILIENCY
Advanced Meters for Reliability and Power Quality]	
Communications Backbone	<u>}</u>	
SCADA	λ	
Emergency Response Plan	X \\	
Safety Review of Design Changes		
Credits		
SAIDI (Sustained Interruption Duration)		Category
SAIFI (Sustained Interruption Frequency)		Operations, Management & Safety
CELID-5 (Interruptions Lasting > 5 Hours)		
ASAI (Availability)		Prerequisites
MAIFI (Momentary Interruptions)		Reliability Performance Monitoring
CEMMI-5 (Multiple Momentary Interruptions)		Credits
AIFI (Interruption Frequency)		Reliability Performance Assessment
Damage and Exposure Prevention		Momentary Interruption Tracking
		Damage and Exposure Prevention
Alternative Sources of Project Electricity Supply		Distribution Redundancy and Auto Restoration
Distribution Redundancy and Automated Restoration		Alternative Source of Supply
Islanding Capability		Power Surety and Resilience
Power Surety for Critical Loads		Power Quality Capabilities
Power Resiliency through Recovery		
Power Quality Measurement		
Capabilities for Power Quality		
Mitigation of Common Risks and Threats		Regional Priority Credits
Identification of Infrequent Risks and Threats		
Innovations][Innovation Credits

2. Energy Efficiency and Environment Category



3. Operations, Management and Safety Category

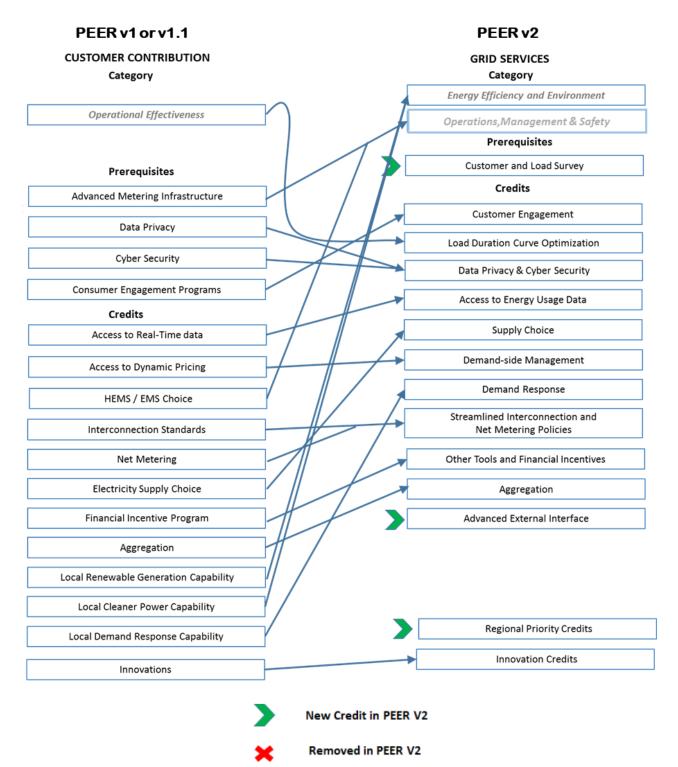


Removed in PEER V2

PEER v2

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4. Grid Services Category



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Credit Compliance Guidance

The table below provides technical guidance on how to demonstrate compliance with each credit under PEER v2. It identifies the key changes, if any, and provides guidance on any additional documentation that may be required. In some instances, the documentation provided during v1 or v1.1 certification process may be sufficient and no additional information is required. Please refer to this table in conjunction with the PEER v2 Reference Guide to ensure all requirements are met. If you have any questions about specific credits and the documentation required, please contact your PEER Coach and they will be able to assist you.

PEER v2 Credit	PEER v1 or v1.1 Credit	Recertification Guidance	Change		
Reliability & Resilier	Reliability & Resiliency (RR)				
Prerequisite – Reliability Performance Monitoring	Option 1: Advanced Meters for Reliability & Power Quality	Share details of advanced meter make and model or share the interruption log.	No		
	Option 2: Maintain interruption log				
Credit – Reliability Performance	1.SAIDI (Sustained Interruption Duration)	Project must provide the SAIFI and SAIDI values for the most recent year (12	No		
Assessment	2.SAIFI (Sustained Interruption Frequency)	months).			
Credit – Momentary Interruption Tracking	1.MAIFI (Momentary Interruptions)	Project must provide the latest MAIFI value for the most recent year or provide details regarding infrastructure available for monitoring MAIFI.	Minor Change (Updated the MAIFI Formula as per the IEEE 1366).		
Credit – Damage and Exposure Prevention	1.Damage and Exposure Prevention	No additional information is required for option 1.	Major change (Option 2 added & Option 3 thresholds were		
		For Option 2 & 3, provide information as requested in PEER v2 Reference Guide.	revised)		
Credit – Distribution Redundancy and Auto Restoration	1.Distribution Redundancy and Auto Restoration	No additional information is required if there is no change. If there has been a change, then provide latest data.	No		
Credit – Alternate Source of Supply	1.Alternative Sources of Project Electricity Supply	No additional information required for Option 1	No		
	2.Islanding capability	Option 2: Project should provide the information regarding transfer control capabilities			
Credit – Power Surety and Resiliency	1.Power Surety for Critical Loads	No additional information is required.	No		
	2.Power Resiliency through Recovery				
Credit – Power Quality Capabilities	1.Power Quality Measurement	No additional information is required.	No		
	2. Power Quality Capabilities				

PEER v2 Credit	PEER v1 or v1.1 Credit	Recertification Guidance	Change		
Energy Efficiency and I	Energy Efficiency and Environment (EE)				
Prerequisite – Environmental Performance Disclosure	EE 1.Source Energy Intensity 2.CO ₂ Emissions Intensity 3.NO _x Emissions Intensity 4.SO ₂ Emissions Intensity 5.Water Consumption Intensity 6. Solid Waste Recycled	Project must provide the latest Energy mix or Energy portfolio for the previous year.	Minor Change (Updated methane multiplier for calculating CO ₂).		
Prerequisite – System Energy Efficiency Coefficient (SEEC) Disclosure	OE System Energy Efficiency	Project must provide the latest information about energy delivered and consumed by project for calculating the % SEEC Improvement.	Minor Change (Added the % SEEC Improvement formula).		
Credit – Environmental Performance Improvement	EE 1.Source Energy Intensity 2.CO ₂ Emissions Intensity 3.NO _x Emissions Intensity 4. O ₂ Emissions Intensity 5.Water Consumption Intensity 6.Solid Waste Recycled	Project must provide the latest Energy mix or Energy portfolio for the previous year.	Minor Change (Updated the methane multiplier for calculating CO ₂).		
Credit – SEEC Improvement	OE System Energy Efficiency	Project must provide the latest information about energy delivered and consumed by project for calculating the % SEEC Improvement.	Minor Change (Added the % SEEC Improvement formula).		
Credit – Renewable Energy and Carbon Offsets	EE Renewable Energy Certificates	No additional information is required for REC unless anything purchased in last 3 years. Project must share the information, or the content of renewable energy purchased or contracted, and carbon credits or carbon offsets as requested in PEER v2 Reference Guide	Major change (Renewable Energy PPAs and carbon offsets are added for calculation).		
Credit – Distributed Energy Resource	EE & CC 1.District Energy 2.Local renewable generation 3.Local renewable generation capability. 4.Local cleaner power capability.	No additional information is required for Option 1 (except any change in local RE), and Option 4. Project must provide information or data for Option 2: Local energy storage, Option 3: Prosumers (Only for Utilities), and Option 5: Regenerative Braking system (Only for Transit) as outlined in the PEER v2 Reference Guide.	Major Change: (Option 2, Option 3, and Option 5 are added).		

PEER v2 Credit	PEER v1 or v1.1 Credit	Recertification Guidance		
Energy Efficiency and Environment (EE)				
Credit – Environmental	EE Environmental Impact	No additional information is required for trees trimmed and wildlife disturbed.	Major change- (Noise level measurements, type of land used for construction are added for Campus and Transit projects).	
Impact Assessment, Disclosure & Management		Campus and Transit projects: Project must submit recent noise-level measurements and information about the area and type of land used (e.g. agricultural, brownfield etc.) as outlined in the PEER v2 Reference Guide		
Operations, Managem	ent and Safety (OP)			
Prerequisite – Triple bottom line analysis	OE Electricity Energy Efficiency	No additional information required on <i>Economic benefits</i> .	New Prerequisite	
	Savings Electricity Energy Efficiency Savings	Project must provide additional information on environmental benefits for the systems considered under economic benefits as described in PEER v2 Reference		
	Operations and Maintenance Efficiency Value	guide.		
	Reliability and Power Quality Value			
	Demand Charge Reduction Savings			
	Electricity Price Opportunity Cost			
	Electricity Energy Efficiency Opportunity Cost			
	Operations and Maintenance Opportunity Cost			
	Reliability and Power Quality Opportunity Cost			
	Demand Charge Opportunity Cost			
	Ancillary Service Opportunity Cost			
Credit – Risk	RR	Project must conduct comprehensive risk assessment for critical assets as described in the PEER v2 Reference guide.	Major change (Risk assessment / Risk analysis methodology is changed).	
Assessment and Mitigation	1.Mitigation of Common Risks and Threats			
	2.Identification of infrequent risks & threats			
Credit – Emergency	RR	No additional information is required.	No	
Response Plan	1.Emergency response plan			
Credit – Safety	RR	No additional information is required.	No	
Review Process	1.Safety review of design changes			

PEER v2 Credit	PEER v1 or v1.1 Credit	Recertification Guidance	Change		
Operations, Managem	Operations, Management and Safety (OP)				
Credit – Operational Processes	RR 1.Waste identification and elimination 2.Failure identification and elimination	No additional information is required.	No		
Credit – Advanced Metering Infrastructure	RR 1. Advanced Meters for Reliability & PQ–Prerequisite CC 1.Advanced Metering Infrastructure–Prerequisite	No additional information is required	No		
Credit – Master Controller	RR 1. SCADA-Prerequisite.	Project must demonstrate compliance with the capabilities as mentioned in the PEER v2 Reference Guide.	Minor Change (Project team to compare the capabilities of the SCADA or any other Master controller system with capabilities mentioned in PEER credit requirements).		
Credit – Communication Network and Information Processing	RR 1.Communication Backbone- Prerequisite	No additional information is required for Communication network. Project must comply with the functionalities of the data acquisition and control system as mentioned in PEER v2 Reference Guide.	Minor change-(Data acquisition and control system functionalities to be verified by project team in line with PEER credit requirements).		
Credit – Energy Management System	CC 1.HEMS-EMS Choice	No additional information is required for the building with capabilities % Type A, % Type B, % Type C. Project should submit the percentage of buildings (% Type D) capable of communicating the data with main master controller or central plant operators.	Minor change (Percentage of buildings capable of communicating with master controller are considered for calculations)		

PEER v2 Credit	PEER v1 or v1.1 Credit	Recertification Guidance	Change		
Grid Services	Grid Services				
Prerequisite – Customer and Load survey	N/A	Cities & Utilities, Campus-multiple tenants: Project must conduct a customer survey by following the guidelines & methodology stated in PEER v2 Reference Guide	New Prerequisite		
		Campus and transit: Project must conduct a load survey as described in PEER v2 Reference Guide.			
Credit – Customer Engagement	1.Consumer Engagement Programs-Prerequisite.	No additional documentation is required for Option 1 and Option 2	Minor change (Option 3: Customer		
		Project must submit the customer satisfaction score for Option 3 as outlined in PEER v2 Reference Guide	satisfaction score added).		
Credit – Load Duration Curve Optimization	OE 1.Load Duration Curve	Project must provide the electricity consumption and peak annual demand for recent year.	No		
Credit – Data Privacy and Cybersecurity	1.Data privacy 2.Cyber security	No additional information is required for Option 2	Minor Change (Security awareness training		
		Project should submit security awareness training program description /content in addition to other practices / policies in Option 1 (cyber security) as mentioned in PEER v2 Reference Guide.	added in Option 1).		
Credit – Access to Energy Usage data	1.Access to real-time data	Project must comply with the features and content as stated in the PEER v2 Reference Guide for effective data sharing and feedback quality (Option 1 and Option 2).	Major change (Additional details & features of platform for effective data sharing & feedback quality added in Option 1 & 2).		
Credit – Supply Choice	1.Electricity supply choice	No additional information is required if the supply choice is available.	Minor Change (Added option for Supply		
		If Supply choice program is not available, project must provide evidence of discussions with grid operators for participating in future supply choice programs. Refer to PEER v2 Reference Guide for detailed requirements.	choice program not being available).		
Credit – Demand side Management	1.Access to Dynamic Pricing	Option 1: Project must provide information about the energy conservation programs/practices as mentioned in PEER v2 Reference Guide.	Major Change (Option 1 added and Option 2: Load management programs for peak demand reduction added).		
		<i>Option 2 - Load management: No additional information is required for dynamic pricing.</i>			
		Option 2 - Load management: Project must provide information on load management programs for peak demand reduction as detailed in PEER v2 Reference Guide.			

PEER v2 Credit	PEER v1 or v1.1 Credit	Recertification Guidance	Change
Grid Services			
Credit – Demand Response	OE 1.Demand response capability CC 1.Local demand response capability	Cities and Utilities: Project must provide different tariff options For both Case 1 and Case 2 - campuses and transit projects: Project must have a system capable of performing DR (demand response) program and comply with the requirements as stated in PEER v2 Reference Guide.	Major Change (Added more requirements for cities and utilities, campus and transit projects.
Credit – Streamlined Interconnection and Net Metering Policies	 1.Interconnection Standards 2.Netmetering 	No additional information is required.	No
Credit – Other Tools and Financial Incentives	1.HEMS/EMS Choice 2.Financial Incentive Programs	No additional information is required.	No
Credit – Aggregation	1.Aggregation	No additional information is required.	No
Credit – Advanced External Interface	N/A	Option 1: Project must install information exchange system with functions as mentioned in the PEER v2 Reference Guide	New Credit
		Option 2: Project must install information exchange system which is Open ADR 2.0 Profile A or Profile B or Profile C Compliant as outlined in PEER v2 Reference Guide.	

CONTACT

When interested in getting your project recertified, connect with GBCI – PEER team (peer@gbci.org) and apply for Recertification. After the payment for recertification is received, you will be assigned a PEER coach to guide you through the recertification process and answer your queries. All the best on your PEER project!