Republic of the Philippines
Department of Energy

DOE-EPIMB Questionnaire Form 2016-08-001

PLANT PERFORMANCE ASSESSMENT

Dear Generators:

In line with the mandate of the Department of Energy (DOE) to ensure the security, reliability and affordability of the supply of electric power in the country, we are currently conducting plant assessment for power generation and distribution systems facilities. The objective of this is to evaluate the over-all performance and efficiency of power generation and distribution system facilities. This information will be used for the evaluation as a reference in formulating policies to address any policy gaps.

We highly appreciate your utmost cooperation in the conduct of this program.

Thank you.

ALFONSO G. CUSI
Secretary, Department of Energy

Please submit accomplished form to:
Director Mylene C. Capongcol
4th Floor, DOE Bldg., Energy Center,
Rizal Drive, Bonifacio Global City
Taguig City
TeleFax N umber: (02) 840-1773

Please provide response for each item. Use extra sheets if necessary.

Section 1: General Information
Name of Power Generation Company:
Head Office Address:
Telephone Number:
Fax Number:
Website:
Main Contact Person:
Position/Designation:
Mobile Number:
Email:
Name of Generating Unit/Facility:
Issuance Date of Certificate of Compliance:
Technology: ( ) Solar ( ) Wind ( ) Hydro ( ) Biomass ( ) Diesel ( ) Coal ( ) Geothermal ( ) Others:_____
Location:
Name of Franchised Distribution Utility the plant is connected to (As applicable):
Year Constructed:
Name of Plant Manager:
Mobile Number:
Email:
Please provide the following documents (per plant) for informative purposes only: • Basic Power Plant Process Flow • Piping & Instrumentation Diagram • Basic Electrical Single Line Diagram • ERC Form 1 from Jan 2013 to end of Aug 2016 (in excel format) • ERC Form 3 from Jan 2013 to end of Aug 2016 (in excel format) • EPIMB-PPDD Form 04-002 (Monthly Operation Report from DOE DC2015-04-0002) from Jan 2013 to end of Aug 2016 (in excel format) • WESM Registration
Date Filled-Up:

Section 2: Plant Performance Assessment Checklist						
Item	**Description**	**Questions**	**Y/N**	**Comments**	**Action Plans**	**Documentary Evidences**
Based on ISO/PDCA Model. PDCA (plan-do-check-act, sometimes seen as plan-do-check-adjust) is a repetitive four-stage model for continuous improvement in business process management.						
PLAN						
P1	General requirements	Are the scope and boundaries of Plant Maintenance defined?		Is it defined throughout the plant or specific area only?		Documents showing scope and boundaries
P2	Management Responsibility	Is management committed to support the high availability and reliability of the plant through total effective and productive maintenance program and initiatives?		In what way is this shown, verbalized or communicated and documented?		
P3	Management Designate	Is there an appointed management designate?		Please provide plant table of organization; there should be a formal organization with job responsibilities identifying who is responsible.		
		Does he report to management on operational issues related to plant performance?				
		Does he report to management on the plant performance in terms of availability, reliability and downtime including the causes and resolutions made?		To who in management does designate reports to?		
P4	Plant Performance & Maintenance Policies and Practices	Is there an existing Plant Performance and Maintenance policies and or related policy for the proper operation and service level performance of the plant?		Kindly provide documentation to support answer		
		Is the policy appropriate to the nature and scale of the organization size, scope and expected outcomes?		Kindly provide documentation to support answer		
		Does it include a commitment to continual improvement in plant performance?		Kindly provide documentation to support answer		
		Does it include a commitment to ensure the availability of information and of necessary resources to achieve objectives and targets?		Kindly provide documentation to support answer		
		Does it include a commitment to comply with applicable legal requirements?		Kindly provide documentation to support answer		

Section 2: Plant Performance Assessment Checklist						
Item	**Description**	**Questions**	**Y/N**	**Comments**	**Action Plans**	**Documentary Evidences**
		Does it provide the framework for setting and reviewing plant performance objectives and targets?		Kindly provide documentation to support answer		
		Does it support the purchase of reliable and quality products, parts and services? And designed to maintain or improve performance of the plant?		Kindly provide documentation to support answer		
		Is it documented and communicated at all levels within the organization?		Kindly provide documentation to support answer		
		Is it regularly reviewed and updated as necessary?		Kindly provide documentation to support answer		
		Is it displayed?				
		Is it approved?		Kindly provide documentation to support answer		
		Is it available to all or concerned personnel?				
P5	Maintenance Planning	Is there a process or system to plan the maintenance activities of the plant?		Kindly provide documentation to support answer		
		Is it consistent with the policy?				
		Does it lead to activities that continually improve the plant performance?		Kindly provide documentation to support answer		
P6	Legal and other Requirements	Does the organization have an access or list of applicable legal/regulatory requirements and other requirements related to plant performance, standard operational output, service level commitments and other performance indicator required?		Kindly provide documentation to support answer		
		Are the legal requirements versus actual performance reviewed at defined intervals?				
P7	Plant Performance Review	Is there a documented plant performance review?		Kindly provide documentation to support answer		
		Does the organization evaluate past and present plant performance, trends and improvements?		Kindly provide documentation to support answer		

Section 2: Plant Performance Assessment Checklist						
Item	**Description**	**Questions**	**Y/N**	**Comments**	**Action Plans**	**Documentary Evidences**
		Are significant plant downtimes, performance gaps or related incidences identified?		Kindly provide documentation to support answer		
		Does the organization identify, prioritize and record opportunities for improving plant performance?		Kindly provide documentation to support answer		
P8	Performance Baseline	Is there an established plant performance baseline?		Kindly provide documentation to support answer		
		Is the plant performance baseline maintained and recorded?		Kindly provide documentation to support answer		
P9	Plant Performance Indicators	Is there an identified Plant Performance Indicator/s for monitoring and measuring performance?		Kindly provide documentation to support answer		
		Are they reviewed and compared to performance baseline as deemed appropriate?		Kindly provide documentation to support answer		
P10	Performance Objectives, Output Targets and Management Action Plans	Is there an established, implemented, maintained and documented performance objectives and targets?		Kindly provide documentation to support answer		
		Is there an established timeframe for the achievement of the objectives and targets?		Kindly provide documentation to support answer		
		Are targets and objectives consistent with the policy?		Kindly provide documentation to support answer		
		Are targets consistent with objectives?		Kindly provide documentation to support answer		
		Are there action plans for achieving objectives and targets?		Kindly provide documentation to support answer		
		Are action plans documented and updated at defined intervals?		Kindly provide documentation to support answer		
DO						
D1	Implementation and Operation	Does the organization use the identified action plans or programs in the implementation and operation?		Kindly provide documentation to support answer		

Section 2: Plant Performance Assessment Checklist						
Item	**Description**	**Questions**	**Y/N**	**Comments**	**Action Plans**	**Documentary Evidences**
D2	Competence, Training and Awareness	Are persons working for or related to plant operation and maintenance competent on the basis of appropriate education, training, skills or experience?		Kindly provide documentation to support answer		
		Are training needs required with the management, control and plant operation and maintenance identified?		Kindly provide documentation to support answer		
		Are appropriate records maintained?		Kindly provide documentation to support answer		
		If there are functions and activities subcontracted, are the contractors aware of the required competence and performance?		Kindly provide documentation to support answer		
D3	Communication	Is there an internal communication with regard to the organizations plant performance and service level commitment, goals and targets and expectations?		Kindly provide documentation to support answer		
		Is there an established and implemented process for making comments or suggest improvements regarding plant performance and targets?		Kindly provide documentation to support answer		
D4	Documentation Requirements	Is there a established and implemented documentation related to plant performance, operation and maintenance?		Kindly provide documentation to support answer		
D5	Control of Documents	Are documents controlled and managed? Who does these?		Kindly provide documentation to support answer		
		Are documents approved for adequacy prior to use? Who approves?		Kindly provide documentation to support answer		
		Are documents periodically reviewed and updated as necessary?		Kindly provide documentation to support answer		
		Are changes and current revision status of documents identified?		Kindly provide documentation to support answer		

Section 2: Plant Performance Assessment Checklist						
Item	**Description**	**Questions**	**Y/N**	**Comments**	**Action Plans**	**Documentary Evidences**
		Are relevant versions of applicable documents available at points of use?				
		Are documents legible and readily identifiable?				
		Are external documents identified and their distribution controlled?		Kindly provide documentation to support answer		
		Does the organization prevent the unintended use of obsolete documents and identify those to be retained for any purpose?		Kindly provide documentation to support answer		
D6	Operational Control	Does the organization identify and plan operation and maintenance activities which are related to plant performance, service level commitment and targets?		Kindly provide documentation to support answer		
		Are critical parameters affecting performance and service level commitments identified?		Kindly provide documentation to support answer		
		How it is maintained? Who is/are responsible and accountable?		Kindly provide documentation to support answer		
		How do they control the critical parameters?				
		Do they have the set of parameters?		Kindly provide documentation to support answer		
		Operator logs available?		Kindly provide documentation to support answer		
		How are critical parameters controlled and monitored? Who is/are responsible and accountable?				
		Are maintenance records kept and filed properly?		Kindly provide documentation to support answer		
		Who are parts of the maintenance chain of command?				
		Does management institutes random checks and surprise visits?				

Section 2: Plant Performance Assessment Checklist						
Item	**Description**	**Questions**	**Y/N**	**Comments**	**Action Plans**	**Documentary Evidences**
		Who is/are responsible for recording deviations, variance and unusual things - e.g., noises, leaks, instrumentation, malfunction, etc				
D7	Design	Does the organization consider plant performance improvement opportunities and operational control in the design of new, modified and renovated facilities, equipment, systems and processes?		Kindly provide documentation to support answer		
D8	Procurement of Services, Products, Equipment, Parts, Fuel and other related plant items	When procuring services, products, equipment, parts, fuel and other plant items, does the organization inform the suppliers that procurement is partly evaluated on the basis of performance, quality requirements and service life?		Kindly provide documentation to support answer		
		Does the organization have an established and implemented criteria or model for assessing impact to plant performance, operation and maintenance effectiveness and efficiency, and efficiency over the planned or expected operating lifetime when procuring these products, equipment and services?		Kindly provide documentation to support answer		
		Does the organization have a defined and documented energy purchasing specifications, as applicable, for effective energy use?		Kindly provide documentation to support answer		
CHECK						
C1	Checking - Monitoring, measurement and analysis	Are key characteristics of operations that determine plant performance monitored, measured and analysed at planned intervals?		Kindly provide documentation to support answer		
		Are results from monitoring and measurement of the key characteristics recorded?		Kindly provide documentation to support answer		

Section 2: Plant Performance Assessment Checklist						
Item	**Description**	**Questions**	**Y/N**	**Comments**	**Action Plans**	**Documentary Evidences**
		Is there a defined and implemented performance measurement plan, appropriate to the size and complexity of the organization?		Kindly provide documentation to support answer		
		Are measurement needs defined and periodically reviewed?		Kindly provide documentation to support answer		
		Does the organization ensure that the equipment used in monitoring and measurement of key characteristics provides data which are accurate and repeatable?		Kindly provide documentation to support answer		
		Are records of calibration and other means of establishing instrument accuracy, precision and reliability maintained?		Kindly provide documentation to support answer		
		Does the organization investigate and respond to significant deviations in plant performance?		Kindly provide documentation to support answer		
		Are results of these activities maintained?		Kindly provide documentation to support answer		
		Are there control processes to manage operators performance and compliance to tasks and duties		Kindly provide documentation to support answer		
C2	Evaluation of Compliance with Legal and Regulatory Requirements	Does the organization evaluate compliance with legal, regulatory, and other requirements to which it subscribed or contracted to its clients at planned intervals?		Kindly provide documentation to support answer		
C3	Internal Audit of Plant Performance, O&M	Does the organization conduct internal audits at planned intervals?		Kindly provide documentation to support answer		
		Are records of audit results maintained and reported to top management?		Kindly provide documentation to support answer		
C4	Non-conformities, correction, corrective action and preventive action	Does the organization address actual and potential non-conformities by making corrections and by taking corrective and preventive action?		Kindly provide documentation to support answer		

Section 2: Plant Performance Assessment Checklist						
Item	**Description**	**Questions**	**Y/N**	**Comments**	**Action Plans**	**Documentary Evidences**
		Are non-conformities or potential non-conformities reviewed?		Kindly provide documentation to support answer		
		Are causes of non-conformities or potential non-conformities determined?		Kindly provide documentation to support answer		
		Is the need for action to ensure that non-conformities do not occur or recur evaluated?		Kindly provide documentation to support answer		
		Are appropriate actions determined and implemented?		Kindly provide documentation to support answer		
		Are records of corrective or preventive actions maintained?		Kindly provide documentation to support answer		
		Are the corrective actions or preventive actions taken reviewed?		Kindly provide documentation to support answer		
		Does the organization ensure that any necessary / planned changes to Plant performance, operation and maintenance be implemented?		Kindly provide documentation to support answer		
		Up to what level of management are the above items reported to?				
C5	Control of Records	Is there an established and maintained records to demonstrate conformity to the plant performance requirements, standards/goals and results achieved?		Kindly provide documentation to support answer		
		Is there a defined and implemented control for the identification, retrieval and retention of records?		Kindly provide documentation to support answer		
		Are records legible, identifiable and traceable to relevant activity?		Kindly provide documentation to support answer		
ACT						

Section 2: Plant Performance Assessment Checklist						
Item	**Description**	**Questions**	**Y/N**	**Comments**	**Action Plans**	**Documentary Evidences**
A1	Management Review – General	Is there a top management review of the organizations management systems related to O&M and performance management at planned intervals to ensure its continuing suitability, adequacy and effectiveness?		Kindly provide documentation to support answer		
		Are records of management review maintained?		Kindly provide documentation to support answer		
A2	Input to Management Review	Are there follow up actions from previous management review?		Kindly provide documentation to support answer		
		Is there a review of the policies related to plant performance, operation and maintenance?		Kindly provide documentation to support answer		
		Are results of the evaluation of compliance with legal and regulatory requirements included in the review?		Kindly provide documentation to support answer		
		Is the extent or degree to which the plant performance objectives and targets have been achieved included in the review?		Kindly provide documentation to support answer		
		Are results of internal audits reviewed?		Kindly provide documentation to support answer		
		Is the status of corrective and preventive actions reviewed?		Kindly provide documentation to support answer		
		Is the projected or planned plant performance for the following period reviewed?		Kindly provide documentation to support answer		
		Are recommendations for improvement reviewed?		Kindly provide documentation to support answer		
A3	Output from Management Review	Are changes in the plant performance of the organization part of the output of management review?		Kindly provide documentation to support answer		
		Are changes to the policy included in the output from management review?		Kindly provide documentation to support answer		

Section 2: Plant Performance Assessment Checklist						
Item	**Description**	**Questions**	**Y/N**	**Comments**	**Action Plans**	**Documentary Evidences**
		Are changes to performance indicators or parameters included in the output from management review?		Kindly provide documentation to support answer		
		Are changes to objectives, targets and other elements of plant performance commitments consistent with the organization's commitment to continual improvement included in the output from management review?		Kindly provide documentation to support answer		
		Are changes to allocation of resources included in the output from management review?		Kindly provide documentation to support answer		

Section 3: Plant Maintenance		
	Questions	Response
1	Describe your Scheduled Maintenance Program. State the frequency, duration, types and scope.	
2	When was your last scheduled Minor Shutdown? Describe it. Does it achieve your shutdown goals?	
3	Do you have annual maintenance shutdown? If yes, when was your last annual shutdown? Describe it. Does it achieve your shutdown goals?	
4	When was your last Major Overhauling done (30 days and above shutdown)? Describe it. Does it achieve your shutdown goals?	
5	Do you have major refurbishment, revamping, major equipment replacement, capacity expansion, major equipment repair works? Those that will entail long shutdown (60 days or more). Describe them, Indicate timetable and status.	
6	What is the biggest issue facing your plant in terms of reliability and capacity? Describe it. Indicate timetable, status and scope.	
7	Do you use Computerized Maintenance Management Software? Describe the functions and Modules of the software. How do you rate its effectiveness?	
8	Do you have Predictive Maintenance Program such as; - Use of On-line Condition Monitoring instruments such as Vibration analysis, etc. - Use of Off-line Condition Monitoring instruments such as Handheld Machinery Analyzer, Thermoscanner etc.	

Section 4: List of Causes of Forced Outages or Unscheduled Shutdown for the Past Five (5) Years		
Causes of Forced Outages (Fishbone Diagram)		
	Top Causes of Forced Outages	Number of times for the past (5) years
	Materials	
1		
2		
3		
4		
5		
	Man	
1		
2		
3		
4		
5		
	Method	
1		
2		
3		
4		
5		
	Machine	
1		
2		
3		
4		
5		
	Environment (Mother Earth)	
1		
2		
3		
4		
5		
	Measurement	
1		
2		
3		
4		
5		

Section 5: Maintenance of Critical Equipment and System					
	List of Critical Equipment	Overhauling Frequency (days)	Last Done	Equipment Replacement Policy or Period	Last Done
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Section 5A: Maintenance of Critical Equipment and System – Steam Boiler

Top Causes of Boiler failures

	Causes of Boiler Failures (Sort by Most Common to Least Common)	Number of Times for the Past 5 years	Remedial Measures to Minimize or Prevent Boiler Shutdown	Status of the Implementation of the Remedial Measures
1				
2				
3				
4				
5				
6				
7				

Preventive Maintenance Strategy/Technology Applied to Improve Performance and Reliability of Boiler and Early detection of problem

	Strategy/Technology	Description	Status
1			
2			
3			
4			
5			
6			

Boiler Tube Thickness Monitoring (mm)
Technology Used in Boiler Tube Monitoring:

	Boiler Section / Material	Max Thickness	Min Thickness	Ave. Thickness	Thickness to Replace Tube	Date Measured / Remarks
1						
2						
3						
4						
5						
6						

Other Boiler Related Issues Preventing Operation at Full Capacity and Pressure. Indicate Measures Taken to Eliminate them.

	Boiler Weaknesses	Measures Taken to Eliminate Boiler Weaknesses	Status
1			
2			
3			
4			
5			
6			

Section 5B: Maintenance of Critical Equipment and System – Steam Turbine				
Top Causes of Turbine failures				
	Causes of Turbine Failures (Sort by Most Common to Least Common)	Number of Times for the Past 5 years	Remedial Measures to Minimize or Prevent Turbine Shutdown	Status of the Implementation of the Remedial Measures
1				
2				
3				
4				
5				
6				
7				
Preventive Maintenance Strategy/Technology Applied to Improve Performance and Reliability of Turbine and Early detection of problem				
	Strategy/Technology	Description		Status
1				
2				
3				
4				
5				
6				

Section 5C: Maintenance of Critical Equipment and System – Other Critical Equipment *(please specify)*				
Top Causes of Turbine failures				
	Causes of Equipment Failures (Sort by Most Common to Least Common)	Number of Times for the Past 5 years	Remedial Measures to Minimize or Prevent Equipment Shutdown	Status of the Implementation of the Remedial Measures
1				
2				
3				
4				
5				
6				
7				
Preventive Maintenance Strategy/Technology Applied to Improve Performance and Reliability of Equipment and Early detection of problem				
	Strategy/Technology	Description		Status
1				
2				
3				
4				
5				
6				

Section 6: Outage Management *(Measures to Improve effectiveness and speed-up implementation of outage activities)*				
	Measures and Technologies Adopted	Description/Features	Performance/Effectiveness Indicators	Status
1				
2				
3				
4				
5				
6				

Section 7: Risk Assessment
(Business Continuity Plan. List of Equipment that will cause force outage or reduction of power capacity as a result of Weather and Other Acts of Nature/Force Majeure Related Factors like Typhoon and the measures taken or plan to prevent it)

	Equipment/Facility	Measures adopted	Status
1			
2			
3			
4			
5			
6			
7			

Section 8: Administration

Labor and Community Situation

1	What is the chance of having disruption of operation as a result of labor and community issues within six (6) months?	

List All License Mechanical Engineers, Electrical and Certified Plant Mechanic Employed by the Power Plant

	Name	Type of License	PRC License Number/ Valid Until	Shifting	Years un Current Position
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
16					
17					
18					
19					
20					

List of Foreigners Working in the Power Plant (Use additional sheet if necessary)

	Name	Position	Degree	License/Qualification
1				
2				
3				
4				
5				

Training Statistics

	Item	Value
1	Number of Manpower Compliment working directly in the power station (excluding non-technical personnel)	
2	Number of Mechanical Engineers	
3	Number of Electrical Engineers	
4	Number of Chemical Engineers/Chemist	
5	Number of Electronics and Communication Engineers	
6	Number of Other Technical Professionals	
7	Number of Vocational Graduates	
8	Number of TESDA Certified Personnel	
9	What is the average number of hours in training per power plant worker? Hr/personnel	

Section 8: Administration		
10	Average Number of Hours of Training per Operator? Hrs/Operator	
11	Average Number of Hours of Training per Maintenance Personnel? Hrs/Maintenance	

Skills Certification Program

	Skills Certification Program	Number of Employees Certified	Certified by
1			
2			
3			
4			
5			
6			
7			

Operation & Maintenance Training for Personnel

	Title of Training or Seminars	Description/Objectives	Number of Personnel who attended	Date Last Conducted or Attended by Personnel
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Section 9. Plant Efficiency (refers to Heat Rate)
Energy Audit: An energy audit is a study of a plant or facility to determine how and where energy is used and to identify methods for energy savings

Energy Audit Information

	Questions	Response (yes/no)
1	Have you conducted an Energy Audit?	
2	If yes, when was the last time you conducted an energy audit?	
3	How often do you conduct energy audit?	
4	What is the total energy savings since you started conducting Energy Audit?	
5	When do you plan to conduct the next energy audit? What are your goals?	

List of Possible Actions (in order of priority in implementation) **to Conserve Energy or Make Equipment/Facility More Efficient** *(For purposes of this technical audit, list down savings that will result to reduce station load).*

	Energy Conservation Measures	Potential Savings	Actual Savings	Status
1				
2				
3				
4				
5				

List of all Major Equipment and their "measured or actual" efficiency *(use separate sheet if necessary)*

	Equipment Name	Specifications	Equipment Efficiency	Motor Efficiency	Combined Overall Efficiency
1					
2					
3					
4					
5					
6					
7					
8					

Section 10: Health Safety Environment and Security		
Work Safety Procedures		
	Safety Related Measures and Procedures	Status
1		
2		
3		
4		
5		
6		
Security		
	Security Measures and Procedures adopted by the Power Plant	Status
1		
2		
3		
4		
5		
6		

Environmental Protection
(List all environmental protection measures implemented that can prevent revocation of license to operate as a result of damages to the environment or prevent protests from the community/public.)

	Environmental Protection Measures / Technologies	Features	Effectiveness Indicators	Status of Implementation
1				
2				
3				
4				
5				
6				

Security Plant Maintenance
Security technologies adopted to prevent disruption of operation that can lead to Plant Shutdown or Deration

	Security Measures / Technologies	Features	Effectiveness Indicators
1			
2			
3			
4			
5			
6			

Section 11: Inventory Management				
Fuels				
	Fuel	Describe sourcing/buying/stocking policies	Inventory (in days of operation)	Days to Order (Lead Time)
1				
2				
3				

List of Major & Critical Equipment that have Strategic Spare Parts *(normally those spare parts that takes several months to order and deliver)*			
1	11	21	31
2	12	22	32
3	13	23	33
4	14	24	34
5	15	25	35
6	16	26	36
7	17	27	37
8	18	28	38
9	19	29	39
10	20	30	40

List of Critical Spare Parts			
1	11	21	31
2	12	22	32
3	13	23	33
4	14	24	34
5	15	25	35
6	16	26	36
7	17	27	37
8	18	28	38
9	19	29	39
10	20	30	40

Section 12: Transmission			
	Transmission Line #	Describe the condition and capacity	Are the lines reliable?
1		*prelude	
2			
3			
4			
5			

Section 13: Distribution			
	Distribution Line #	Describe the condition and capacity	Are the lines reliable?
1		*prelude	
2			
3			
4			
5			

Section 20: Legal Compliance					
No.	**Areas**	**Legal Requirement**	**Permit, law, regulation**	**Responsible**	**Status**
1	ECC	Environmental Compliance Certificate	Republic Act No.7160, all known as "Local Government Code as of 1991"	DENR	
2	Air Quality Management	Air Quality Management Permit	Republic Act. No. 8749, also known as "Philippine Clean Air Act as of 1999"	DENR	
3	Waste water management		Clean Water Act of 2004 or Republic Act No. 9275	DENR	
4	Solid Waste management		Ecological Solid Waste Management Act of 2000 or Republic Act No. 9003	DENR	
5	Hazardous waste		Republic Act 6969	DENR	
6.	Annual Power Plant Inspection	Code of the Philippines (PD 1096)	-DPWH Circular no. 3, series 2011 -IIEE Code and RA No. 7920 " New Electrical Engineering Law" -PSME Code and RA No. 8495 " The Mechanical Engineering Law of 1998" -Bureau of Fire Safety Inspection Certificate, PD No. 1185, NFPA 13, 14, 74 and 20. -Electronics Enforcement Section Certificate of inspection, RA no. 9282, The Electronics Act of 2004. -Certificate Inspection of Sanitary/Plumbing -Structural Stability, CE RA No. 544 (RA no. 1582, PD 1096	Local Government	

Last Questions:
When do you think (your best guest) the Plant/Unit will have the next forced outage (in months from now)?

Remarks:
_____
_____
_____

Accomplished by: _____ *Signature:* _____
Position: _____ *Date:* _____

Please write your complete name, designation and affix your signature to authenticate the supplied information. Thank you.

This Plant Performance Assessment Template was developed by the Institute of Integrated Electrical Engineers of the Philippines, Inc. and Philippine Society of Mechanical Engineers for the Department of Energy

FORM 1

Republic of the Philippines
ENERGY REGULATORY COMMISSION
12/F Pacific Center Bldg.
San Miguel Avenue, Pasig City

COC No. _____
Application No. _____
Date Filed _____

APPLICATION FOR COC

- ☐ **IPP**
- ☐ **SGF – Outside Ecozone**
- ☐ **SGF – Inside Ecozone**
- ☐ **SGF to IPP (IMEM)**

1. INFORMATION ON THE APPLICANT-OWNER: Line of Business _____
Owner&Operator **Owner**

1.1 Business Name: _____
Type of Organization: _____
Business Address: _____
Number & Street: _____ City/Town: _____
Province & Zip Code: _____
Website (if available): _____
E-mail Address: _____
Tel. No : ( )
Fax No : ( )

1.2. Chief Executive Officer of the Company:
Name: _____
Tel. No.: ( ) Fax No.: ( )
E-mail Address: _____ Cellphone No.: _____

1.3 Authorized Representative to ERC:
Name and Title: _____
Address: _____
Telephone: ( )
Fax No.: ( )
E-mail Address: _____
Cellphone No. : _____

APPLICATION FOR COC

Name of Generation Company/Facility: _____

2. GENERATING FACILITES OWNED: Type of Power Plant _____ Number of Facilities ___ Number of Units ___

2.1 EXISTING FACILITIES

	GENSET NO. 1	GENSET NO. 2	GENSET NO. 3	GENSET NO. 4	GENSET NO. 5
Exact Location of Genset					
Commissioning Date/Installed					
Economic Life					
Engine					
Manufacturer					
Model					
Type					
Serial No.					
Speed					
Rated Capacity					
Generator					
Manufacturer					
Serial No.					
Speed					
Voltage					
Frequency					
Power Factor					
Rated Capacity					
Dependable Capacity					
Fuel					
Turbine					
Manufacturer					
Serial No.					
Speed					
Type					
Rated Capacity					

2.2 FACILITIES TO BE INSTALLED IN THE NEXT FIVE (5) YEARS

Name of Facility	Location	No. of Units	Installed Capacity	Reliable Capacity	Fuel (Diesel/Gas etc.)	Commissioning Date	Economic Life

Name of person who provided the above information: _____
Signature: _____ ***Date Accomplished:*** _____
Res. Cert. No. / Passport No. (if Foreigner): _____
Date Issued: _____ ***Place* Issued:** _____

FORM NO. 3

Three-Year (Latest) Operational History Per Plant

Name of Generating Company/Facility: _____

A. Technical Data

Year 1	Fuel Consumption (Liter)	KWH Generated	KWH Sold	KWH Company Use	KWH Loss or unaccounted	Average Peso/KWH	Liter equi/KWH	Hrs of operation
January								
February								
March								
April								
May								
June								
July								
August								
September								
October								
November								
December								
Total								

Year 2	Fuel Consumption (Liter)	KWH Generated	KWH Sold	KWH Company Use	KWH Loss or unaccounted	Average Peso/KWH	Liter equi/KWH	Hrs of operation
January								
February								
March								
April								
May								
June								
July								
August								
September								
October								
November								
December								
Total								

Year 3	Fuel Consumption (Liter)	KWH Generated	KWH Sold	KWH Company Use	KWH Loss or unaccounted	Average Peso/KWH	Liter equi/KWH	Hrs of operation
January								
February								
March								
April								
May								
June								
July								
August								
September								
October								
November								
December								
Total								

Three-Year (Latest) Operational History Per Plant

Name of Generating Company/Facility: _____

B. Operating Expenses

Year 1	Depreciation	Repairs and Maintenance	Adminstrative and General	Others	Total
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
Total					

Year 2	Depreciation	Repairs and Maintenance	Adminstrative and General	Others	Total
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
Total					

FORM NO. 3

Three-Year (Latest) Operational History Per Plant

Name of Generating Company/Facility: _____

Year 3	Depreciation	Repairs and Maintenance	Adminstrative and General	Others	Total
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
Total					

C. Fuel Base Prices and Heat Rates

Year 1	Plant Efficiency	Peso/Million BTU	BTU/KWH	Peso/KWH
Bunker				
Diesel				
Steam				
Coal				
Others				

Year 2	Plant Efficiency	Peso/Million BTU	BTU/KWH	Peso/KWH
Bunker				
Diesel				
Steam				
Coal				
Others				

FORM NO. 3

Three-Year (Latest) Operational History Per Plant

Name of Generating Company/Facility: _____

Year 3	**Plant Efficiency**	**Peso/Million BTU**	**BTU/KWH**	**Peso/KWH**
Bunker				
Diesel				
Steam				
Coal				
Others (pls. specify)				

Note: Please provide additional sheet(s) if necessary.

Schedule of Loans : _____
Schedule of Loan Amortization : _____
Actual Cost of the Plant in service : _____

Name of person who provided the above information: _____
Signature: _____ *Date Accomplished:* _____
Res. Cert. No. _____
Date Issued : _____
Place Issued: _____