# ODISHA POWER GENERATION CORPORATION LTD. IB THERMAL POWER STATION, BANHARPALI

STANDARD OPERATING PROCEDURE

CONTRACTOR SAFETY MANAGEMENT PROGRAM (CSMP)



Document No.EM4/61(Part A)

Rev No-06

Filed At: EHS, MCR, Drawing Section & Document Folder

#### 1. PURPOSE

The purpose of Contractor Safety Management Procedure (CSMP) is to specify requirements for managing safety when contracting work.

These procedures also specify the requirements to work by contractors at the OPGC sites in order to:-

- Eliminate contractor related accidents that affect OPGC people or property or could result in business interruption.
- · Eliminate accidents or injuries to contractor personnel and property.
- Maintain excellence in safety & adopt loss control measures by contractors working in OPGC sites.
- Establish minimum standards for control of work place injury and environmental damage/loss.
- Comply with specific requirements to avoid work place danger from specific hazards during contract execution in OPGC sites

#### 2. SCOPE

CSMP applies to the contractors and sub-contractors performing work for OPGC, ITPS. It describes the safety management requirements for contracted work from the requisition of the work through to the contract closure and contractor evaluation. It only focuses on the safety aspects of contracted work.

The Contractor Safety Management procedure is not applicable to contractor work executed using an Engineering, Procurement and Construction (EPC) Project Contract agreement.

This procedure consists of the following five principal contractor safety management elements.

- i. Contractor prequalification
- ii. Contract administration
- iii. Project EHS management & monitoring
- iv. Final evaluation
- v. Contractors SHE rules & regulations (Annexure- 4/61)

#### 3. RESPONSIBILITY

Plant Manager is ultimately responsible for implementing and maintaining this Contractor Safety Management Procedure. However, role and responsibilities of Contract Administrator, Project Manager and Contract Monitor are defined in the definitions below.

#### 4. DEFINITIONS

<u>Contractor</u> – A person or company contracting with OPGC to supply products or services.

<u>Sub-Contractor</u> - A person or company employed by the prime or general contractor who is contracting with OPGC to supply products or services.

<u>Contractor Pre-qualification</u> – This process is an assessment of contractors wishing to work at OPGC. The process is independent of individual contracts and is carried out to ensure that contractors with acceptable past safety performance. Once a contractor qualifies for a particular nature of job then the qualification will remain valid for a period of two years from the date of qualification unless otherwise serious EHS observation(s)/violation(s)/ accidents/ reported/occurred or comes with poor safety performance evaluated for any of the contract during this tenure.

<u>Contract Administrator</u> – An OPGC person assigned responsibility for administering contracts, including preparation of the contract tender or request for proposal (RFP) documents, arranging pre-bid meetings, coordinating the bid/ proposal evaluation process and recommending the awarding of the contract.

<u>Project Manager</u> – An OPGC person who is given the overall responsibility and authority for the successful completion of a project. His/ her responsibilities include the assignment of the contract monitor, conducting the pre-construction/execution site meeting, resolving contractor safety performance issues, final inspection of the work, conducting the closing meeting with the contractor and completing the contractor evaluation.

<u>Contract Monitor/ Engineer In Charge (EIC)</u> – An OPGC person who reports to the Project Manager and is responsible for monitoring the contractor's safety performance and providing feedback to the Project Manager. The Contract Monitor will compare the contractor's work and work methods with the standards and expectations defined in the contract.

<u>Contractor Safety Orientation</u> – A meeting at the start of each contract involving all contractor employees to discuss OPGC safety standards and the specific safety requirements for the contracted work.

<u>Contractor Evaluation</u> – An evaluation of the contractor's safety performance during the execution of the work. The evaluation is completed at the end of the project and filed for future reference.

<u>High-Risk Work Hazards</u>: Hazards which, should an incident occur, may result in a fatality or disability, either permanent or temporary.

<u>High-Risk Work</u>: A work (including the whole work or a specific activity in the total work) that exposes OPGC People or Contractor(s) to High-Risk hazards. Table **Appendix A** of this standard provides a list of activities which could expose contractors to High-Risk Hazards.

**Low Risk Work:** Work that is not involved with any of the high-risk activities referred under Appendix A

<u>Hazard Assessment:</u> An assessment of the contracted work to identify and document the hazards inherent to the work site and facility. The hazard assessment is provided to the bidders as part of the bid/request for proposal documents.

**Project Safety Plan**: A process to identify and document the sequence of tasks to complete a project and to analyze the safety issues for each task.

Job Safety Analysis (JSA) & Pre-Job Briefing (PJB) - As defined in the OPGC Safety Procedure (EM 4/78) for Job Safety Analysis and Pre-Job Briefing.

*Note:* Contractor Safety Management program covers to address both safety and environmental compliances as expected by OPGC management.

#### 5. PROCEDURE

#### 5.1 PRE-QUALIFICATION

The purpose of Contractor Pre-Qualification process is to assess a contractor's past safety performance and the quality of their safety management programs to determine if they qualify to work for OPGC.

Normally all contractors performing high-risk work required be pre-qualified and low risk performing contractors are exempted from pre-qualification process. However, OEM high-risk single tender jobs may be exempted from pre-qualification but are subjected to pre-& post-award EHS monitoring, evaluation and review under CSMP.

In case of special situation where contract awarded to EHS non-qualified bidders under special approval, the concerned Project Manager has to address the risk adequately to complete the task in a safer manner complying OPGC EHS Rules & Regulations.

OPGC reserves the right to qualify or disqualify a contractor on safety ground without assigning any reason thereof.

The contractor pre-qualification process will include:

- a. Project Manager of the concerned job will assess the overall risk involved with job and categorize the job as High or Low risk. He will provide the risk assessment document with job risk category to the contract administrator.
- Contract Administrator shall provide 'Contractor Pre-Qualification Questionnaire' to Contractors wishing to provide high risk services to OPGC.

- c. The contractors shall submit the same with all the information requested in the form.
- d. A qualified person, committee (tender committee) or third party shall conduct the prequalification assessment and determine if a contractor is qualified for the work to be contracted. The Person or committee or third party assigned to perform the pre-qualification evaluation of the contractors must have relevant knowledge and competency according to the profile of the job which the contractor may perform for OPGC. The committee consisting the Project Manager of the concerned team & Contract Administrator or their authorized representatives will assess the filled questionnaire to determine if that contractor is qualified for the work (to be contracted). The committee if desired so may involve EHS.
- e. If there is insufficient information to complete the assessment or if OPGC questions the information provided by the contractor, a due diligence of the contractor should be carried out through official meeting and/or video conferencing and/or over telephone and/or any electronic media with contractor or its client. The due diligence report shall be recorded for decision making. For the cases where none of the contractors qualify, a non-qualified contractor may be allowed for contract bidding process only on assurance of the following steps
  - i. Written confirmation and condition from the contractor that appropriate safety measures will be put in place by the contractor and all risks are appropriately managed as per OPGC safety rules and regulations. In this case, OPGC management must have the confidence that the Contractor will dispense the job in accordance with the OPGC site safety rules.
  - The concerned Project Manager will have an appropriate safety plan with all risk control measures for successful completion of the project.
- f. The assessed 'Contractor Pre-Qualification Questionnaire in **Appendix-F**' of contractors shall be recorded & maintained with the Contract Administrator.
- g. A qualified contractor list must be developed and maintained by the Contract Administrator on 'List of Qualified Contractors- Appendix-G'. The contractor pre-qualification information should be updated regularly by Contract Administrator.

#### 5.2 CONTRACT ADMINISTRATION

Administrating of contract is the responsibility of the Contract Administrator, Head (SCM). The Contract Administrator collects the specific hazards present in the project on 'Project Hazard Assessment' from the Project Manager and includes it along with 'Contractor Pre-Qualification Questionnaire' & applicable 'EHS Regulations for Contractors' – Annexure EM

61 in request for proposal (RFP) document or in the tender document depending on case to case basis.

Contract administrator shall also arrange pre-bid EHS meeting/discussion of contractors with concerned Project Manager &/or EIC for all high risk open tendering. Here the Project Manager &/or EIC will communicate OPGC's EHS expectation to contractors in the pre-bid meeting.

The contractor shall fill up the 'Contractor Pre-Qualification Questionnaire' with relevant information and send it along with the bidding documents.

Contract administrator will arrange "Contractor Pre-Qualification Questionnaire' assessment meeting.

The successful bidder(s) should demonstrate to the Contract Administrator and Project Manager that they can meet the requirements of the tender/ RFP. OPGC will demonstrate good judgment by selecting contractors that are pre-qualified with satisfactory safety information.

Contract administrator shall further ensure that the legislated/statutory EHS standards and OPGC specific project EHS requirements are included in the tender/RFP and contract documents.

The selected contractor shall provide a project safety plan to the satisfaction of the concerned Project Manager complying with the site safety requirements. In case the contractor fails to provide the above then the contractor shall abide by OPGC EHS rules & regulations. The plan will include the identification and control of the project related hazards, work coordination and mitigation of upstream & downstream hazards.

#### 5.3 PROJECT MANAGEMENT AND MONITORING

Project management and monitoring is the process that ensures the contractors are complying with the safety requirements of the contract. During the course of project, the contractor has to abide by the 'Legal & Statutory Safety requirements, OPGC Contractors SHE Rules & Regulations' – (Annexure-EM 61), Project Safety Plan and any other agreed clause. Project Managers (Functional Heads such as Heads of Main Plant, CHP, MGR, Civil, Admn., CSR & so on) have the responsibility to oversee the successful and safe completion of the project in their respective areas of responsibility. In order to do so, they have to:

- a. Conduct a pre-mobilization site meeting with the selected contractors' representative to review the project including the safety hazards and OPGC policies, procedures and specific safety requirements.
- b. Review the 'Project Hazard Assessment & Safety Plan' with the contractor.

- c. Ensure that all Contractor employees attend a general safety orientation and project specific safety orientation to meet project specific safety requirements. Any contract employees joining the project must receive the safety orientation before they start work.
- d. Confirm the certificates of qualification for contractor's on-site employees, and the inspection and maintenance records for on-site equipment.
- e. Complete the final evaluation of the contractor's safety performance and make a recommendation as to whether, or under what circumstances, the contractor should be considered for future work.
- f. Identify the person responsible for contractor monitoring. A Project Manager may decide to perform the responsibilities of Contract Monitoring by him/herself.
- g. Provide periodic feedback to the contractor management on the safety performance including any Unsafe Actions and Unsafe Conditions that require corrective action

In the management and monitoring phase, Contract Monitor assists the Project Manager to assess:

- i. Safety deficiencies observed
- ii. The degree of co-operation in correcting deficiencies
- iii. The contractor's work methods, housekeeping practices and equipment condition
- iv. Deviations from the original plan
- v. Accident and incidents that occurred during the project execution
- vi. Any other significant EHS issue

#### 5.4 CONTRACT MONITORING

Contract Monitoring is the process that ensures that the contractors are complying with the EHS requirements of the contract. The Contract Monitor has the following responsibilities regarding Contractor Safety Management:

- Conduct at a minimum the work observations of the Contractors as defined in the
  monitoring requirements table below. Monitoring through leadership safety walk, safety
  observations, safety inspections are separate from this Contract monitoring by contract
  monitor however the observations coming from the above may be included in contract
  monitoring process.
- The work observation should include an assessment of the Contractor's daily job safety plan, critical work methods, use of protective equipment, tools, emergency plans etc.)

Level of Risk	Minimum Monitoring Requirements		
High-Risk Works	Annual Maintenance Contract (AMC): Minimum monthly one documented work observation		
	Short-Term Contract (more than a week): Minimum Weekly one documented work observation.		
	Short-Term Contract (one week or less): Minimum one documented work observation		
Other Works (Low risk category)	Short duration spot checks or inspections, office work, classroom training and any other work not involved with any of the high-risk activities are exempted from a documented work observation requirement.		

**N.B:** Project Manager may decide and implement more frequent monitoring if he/she feels essential to fulfil safety compliance requirements.

- Contractor Monitor shall provide feedback to the Contractors/ to reinforce positive behavior and correct any work place hazard (unsafe act and condition).
- · Submit & reports work observation reports to the Project Manager

## 5.5 CONTRACTOR'S SAFETY PERFORMANCE FINAL EVALUATION

Upon completion of the project, Project Manager has to complete a final evaluation of contractor's safety performance on 'Project Final Evaluation, Refer Appendix-C' for short term contracts. AMC Contracts shall be evaluated at least at yearly interval in addition to the project final evaluation. The evaluation ratings shall be communicated to the concerned contractor on evaluation. It shall be based on the 'Project Work Observation/Project Monitoring records and feedback from Contract Monitor. If required, the Project Manager may ask feedback from the EHS Manager. In the evaluation, he has to make a recommendation to Contract Administrator as to whether or not, or under what circumstances, the contractor should be considered for future work. These evaluation documents shall be filed at Project Manager & Contract Administrator

## 6. CONTRACTORS SHE RULES & REGULATIONS (ANNEXURE EM- 61)

#### 7. AUDIT

The Contractor Safety Management program shall be audited according to the AES Internal Audit Standard requirements and schedule and other requirements.

#### 8. EMPLOYEE TRAINING:

OPGC will provide training to ensure that employees and agents involved in Contractor Prequalification, Contact Administration, Project Management and Contract Monitoring have the knowledge and skills required to fulfill their responsibilities. Training must be logged with name and date of training

#### 9. ENFORCEMENT POLICY:

The ultimate purpose of the enforcement Policy is to ensure that all employees manage and control risks effectively, thus preventing harm.

The purpose of enforcement is to:

- Ensure that employees act to deal immediately with serious risks;
- · Promote and achieve sustained compliance with EHS standards;
- Ensure that employees who breach EHS requirements, and team leaders or managers who
  fail in their responsibilities, may be held to account,

#### **INVESTIGATION:**

EHS committee/ Plant Manager will initiate investigation process for EHS violations; the following steps have to be followed and documented:

- 1. The involved employees in the EHS violation will be questioned,
- 2. The violation site will has been investigated, notes shall be documented.
- Depending on the violation size and severity, the EHS committee/Plant Manager will decide the actions to be taken.
- 4. Respective TL/ Manager will be notified and informed about the investigation results.

#### REMEDIAL ACTIONS:

As mentioned above, the safety committee/ Plant Manager/ Director Operations will decide on case to case basis what action will be taken based on severity of the violation, the action can be:

- Training
- · Counseling/Verbal warnings
- Warning letter
- Limited work suspension
- Termination

#### 10. RECORD FORMATS

Revision No & Date	Prepared By	Reviewed By	Approved By
R-06, 21.02.19	U.K Pahi	Sanjay Garhwal Sukanta Mohapatra	Director Operations

Refer: Formats as per below Appendixes

# Appendix A High Risk Activities

	Activity
1	Activities on or near equipment with the potential to cause Arc Flash
2	Activities in a road way potential to be struck by vehicles (Does not include driving or travelling on a public road way.)
3	Activities with drowning potential
4	Activity involving work at height above 1.8 meters (6 feet) and any pole climbing
5	Handling of hazardous substance which can cause acute injury, exposure to ionization sources or potential to cause explosion
6	Activities with potential for live voltage exposure ≥ 50 Volt
7	Activities on or around pressurized safety valves or other energized energy relief devices where there is the possibility of exposure to the stored energy if released
8	Hoisting and Rigging
9	Hot Work outside of its designated locations
10	Activities involving Confined Space entry or potential for entrapment/engulfment such as work inside a trench, tunnel, etc.
11	Tree Trimming and related activities with the potential to cause injury by tree trimming equipment and or hit by falling tree or limb
12	Activities involving operation or working in vicinity of operating plant equipment
13	Activities in explosive areas due to potential accumulation of combustible dust or vapor
14	Activities on or near rotating, rolling or moving equipment or its parts with potential to causes cut, entrapment, crushing or caught by injuries
15	Activities with potential to cause hit by falling objects

## APPENDIX – B WORK OBSERVATION FORM

Date:	Contract Company:
	Contractor's Site In Charge Name
Work Location:	Job Task:
Job Safety Plan: (written, wel Observations:	I communicated, high-risk hazards identified, effective controls/barriers)
Hazardous Energy Control: approach distance) Observations:	(de-energized, work permit, tagging, grounding/bonding, cover-up,
Equipment & Tools Condition Observations:	on-
Vehicle Set-up: (proper location Observations:	on, braking device, outriggers & pads, grounding)
Housekeeping- Observations:	
Personal Protective Equipment protection) Observations:	ent: (rubber gloves, fall arrest, hard hat, safety boots, face, eye, hearing
Work Methods: (entry permi Observations:	ts, rigging, crane operation, material handling, body positioning)
Any other:	
Contractor's Comments:	
Follow-up Action Required:	
Target Completion Date:	
Contractor's Site in Charge	Name & Signature:
Contract Monitor's Name &	¿ Signature:

## APPENDIX-C

#### CONTRACTOR SAFETY PERFORMANCE EVALUATION FORM

To be filled up by OPGC Project Manager (minimum yearly for AMC Contract & at the end contract for short term contracts). To be filed at Project Manager & Contract Administrator

Evalua	tion period-		
Contra	ctor's Name: -		
Contra	et Job: -		
Contra	ct type (Short Time or AMC):-		
Job Ri	sk Category- (High):-		
Sl.No	Safety Attributes	Max Marks	Marks Earned
01	Compliance of PPEs (quality & consistency in use)	10	
02	Housekeeping	10	
03	Involvement in JSA preparation & PJB, JSA & PJB adequacy	10	
04	Work Permit compliance (LOTO, Hot work, Confined Space, Height, Rigging & Lifting, and Excavation etc.)	10	
05	Safety Supervision (No. & quality Safety Supervisors deployed, Safety walk participation, Safety Inspection, reporting of observations	10	
06	Pro-activeness & response in implementing corrective actions within target date	10	
07	Use of correct & tested tools, equipment	10	
08	EHS education/ awareness & program participation (safety meeting, training, tool box etc.)	10	
09	Pro-activeness in Incident Reporting, EHS Communication and Information	10	
10	Environmental Compliance (waste handling, spill etc.)	10	
	Total	100	
	Contractor Category		

## CONTRACTOR RANKING-

Category	Scoring
Outstanding	81-100
Very Good	71-80
Satisfactory	61-70
Average	51-60
Unsafe	<50

## NOTE: -

Unsafe- Not recommended

Average- May or may not. Project Manager may recommend depending on the contractor's attitude.

Recommended / not recommended for future contract.

Name & Signature of Project Manager-

Date-

	JOB/PROJECT HAZARD ASSES	Appendix D SSMENT (t		contract prop	osal)
Nan	ne of the job:	Department:			Date:
SI No	Reference Hazard	Describe the Specific Hazard	OPGC's action to control the hazard	Contractor's action to control the hazard	Remark
1	Electric Arc Flash				
2	Vehicles movement				
3	Deep Water Drowning				
4	Work at height (Scaffolding, Platform, Gratings, Guard Rail)				
5	Hazardous Substance/Chemical				
6	Electric Voltage >50 Volt (Contact, back feed, induction, static charge)				
7	Stored Energy (Pneumatic, hydraulic, gas pipelines, gas cylinder etc.)				
8	Hoisting, Rigging & Material Handling				
9	Hot work				
10	Confined Space				
11	Tree trimming/Felling				
12	Mobile Equipment				
13	Combustible/Flammable dust/Vapour				
14	Rotating equipment/machine				
15	Falling of object				
16	Any other				
Risl	Category: High/Low:	Project M Signature	lanager's Nan	ne:	

Note: Concerned Project Manager shall provide duly filled in hazard assessment information in the above prescribed format while initiating the proposal.

## Appendix E-Project Safety Plan for High Risk Jobs

	Date:		Name of the Work:	
Contr	ractor's Supervisor:	Contractor Site In charge:		
No.	Task / Job Step	Major Hazards	Control Measures (Preference in order: Elimination-Substitution-Engineering Controls-Administrative Controls-PPEs	

**Note:** Concerned Project Manager shall jointly finalize the project safety plan with the selected contractor before job execution.

# Appendix- F CONTRACTOR PRE- QUALIFICATION QUESTIONNAIRE

## IMPORTANT INSTRUCTIONS:

This questionnaire must be completed entirety and accompanied with all requested attachments for OPGC review, prior to any opportunity to contract work with OPGC.

Omitting or reporting false information on this questionnaire could result in the disqualification or removal from OPGC's List of Qualified Contractors. OPGC reserves the right to conduct random or for-cause audits of the information stated in this questionnaire. Additional documentation may be requested by OPGC to support statements made on this questionnaire.

Company's Name: Con		Contact Person:			
Postal Ac	ldress:				
Telephor	ne – Landline	Mobile			
Fax		E-mail	E-mail		
Safety H	istory  provide data for the previous two (2) calendar years)	Year	Year		
	of First Aid Cases				
Number	of Lost Time Incidents (LTI)				
Total nu	mber of lost time work days due to accidents				
Number	of fatalities				
Sr no.	o. Written Safety Programs, Policies and Procedures		Yes	No	
1	Does your company have a written Health, Safety	and Environment Policy?			

	(if yes then provide a copy of the same)	
	Does your company hold separate safety meetings to address safety issues?	
	If yes, who attends these meetings? (please tick)	
2	□ All employees	
	☐ Field employees only including supervisor	
	☐ Field employees only excluding supervisor	
	□ Only Supervisors	
3	Do you conduct a pre-project hazard analysis?	
	(If yes then provide a copy of a completed hazard analysis)	
4	Do you conduct weekly or daily pre-work safety talk / toolbox meetings?	
	Does your company provide safety training to your employees?	
5	(If yes then provide a list of the safety training courses provided and participants, in the last one (1) year)	

Signed, sealed and	submitted on behalf of	
Company Name		Company Stamp/ Seal
Signature		
Name	Title	Date
FOR OFFICIAL U		Reference No.
tick one)  □ Qualify to work		f safety management programs. The above contractor: (please
Name	Signature	Date

## APPENDIX- G QUALIFIED CONTRACTORS LIST

Team: Contract Cell Year:

S. No	Contractor's Name	Area of Work / Trade	Date of Pre-Qualification	Reference No
				,
				-
		-		

