



**Pacific Gas and
Electric Company**

Matthew Levy
Director
Labor Relations

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18-33-ESC

December 13, 2018

Joshua Sperry, Senior Union Representative
Engineers and Scientists of California, Local 20
IFPTE (AFL-CIO & CLC)
810 Clay Street
Oakland, CA 94607

Dear Mr. Sperry:

The Company and Union have concluded negotiations for newly represented employees in the Gas Process Safety Engineering department. The agreed upon contract language and job descriptions are included as attachments to this agreement.

1. Implementation Date

All these employees will be included in the general ESC-PG&E contract as of the implementation date, which will be the first of the month that follows ratification of the agreement by ESC.

2. Classification Groups

All Classifications will be part of one Line of Progression and one Classification Group in the Contract, to be called "Gas Process Safety Engineering."

3. Seniority

Seniority shall be determined per Title 13 using each employee's date of hire at PG&E.

4. STIP

STIP target participation rate will remain at current rates: 10% for Journey, Senior, and Senior Consulting level positions, and 15% for Principal level classifications. Future hires' STIP target will be 10% for all classifications except Principal, which is 15%.

5. Recognition Clause

The parties agree to modify Title 3 of the Contract to reflect the inclusion of these groups by referring to the NLRB case numbers as shown below:

TITLE 3. RECOGNITION

3.1 RECOGNITION

...

XX. NLRB Case 20-RC-174840, May 31, 2016, Gas Process Safety Engineers

6. Exhibit A, Exhibit D and Appendix 1

The new Classification Group will be added to Exhibit A as shown in Attachment 2. bid codes will be established for all positions. Classification-specific working conditions (Attachment 1) will be added to Exhibit D and job descriptions (Attachment 3) will be added to Appendix 1.

7. Process Safety Engineering partnership with other departments


Due to the unique role of this department in the organization, and the need for partnership with other departments, it is important to recognize that many of these job duties are not exclusive, as noted in the job descriptions. Process Safety knowledge and competency must be embedded throughout the Gas organization.

If you are in accord with the foregoing and agree thereto, please so indicate in the space provided and return one executed copy of this letter to the Company.

If you agree, please so indicate in the space provided below and return one executed copy of this letter to the Company.

Very truly yours,


PACIFIC GAS AND ELECTRIC COMPANY

By: 
Matthew Levy
Director

The Union is in agreement.

ENGINEERS AND SCIENTISTS OF CALIFORNIA
LOCAL 20, IFPTE, AFL-CIO and CLC

12/13, 2018

By: 
Joshua Sperry
Senior Union Representative

Attachment 1: Additions to Exhibit D

PROCESS SAFETY ENGINEERING

a) CCPSP reimbursement

Reimbursement of professional accreditation (CCPS Certified Process Safety Professional (CCPSP)) fees for monthly employees: Company shall reimburse CCPSP professional accreditation application, testing, and annual renewal fees. Company shall reimburse employees for the first CCPSP application and exam, but not for second and later applications/exams. Exam review courses shall be attended on the employee's time; reimbursement of tuition from eligible programs will continue to be covered under the Tuition Refund Program.

b) Senior Advising Engineer

When considering candidates for Senior Consulting Engineer vacancies, the selection committee may elect to fill a Senior Advising Engineer position if the best qualified candidate does not possess an active California Professional Engineer registration. The duties and pay range will be the same for Senior Advising and Senior Consulting Engineers. If the Company elects to fill vacancies, the Company shall determine if creating a Senior Advising Engineer position is appropriate and will notify the selection committee.

Attachment 2: New Classification Group

Ranges shown are monthly for 2018

GAS PROCESS SAFETY ENGINEERING				
	Min monthly	Max monthly	Min annual	Max annual
Gas Process Safety Engineer, Associate-ESC	6,083	7,905	73,000	94,854
Gas Process Safety Engineer-ESC	7,500	10,008	90,000	120,100
Gas Process Safety Engineer, Senior-ESC	9,000	11,648	108,000	139,774
Gas Process Safety Engineer, Sr Consulting-ESC	10,167	13,083	122,000	157,000
Gas Process Safety Engineer, Principal-ESC	11,083	14,083	133,000	169,000

Attachment 3: Job Descriptions

<u>GAS PROCESS SAFETY ENGINEER, ASSOCIATE (52218592)</u>	
Summary	This is an associate--level engineer job that works under the general technical direction of more experienced engineers. Depending on previous experience with process safety, engineers in this position will gain and enhance a basic understanding of Process Safety Management (PSM) principles. Uses independent judgment in applying process safety principles, working with close supervision. Works with engineers, project managers, construction personnel, and other business partners in assessing process safety needs.
Job Duties:	<p>Depending on previous process safety experience, initial assignments from the tasks below will require direction and supervision; with experience, the independence and responsibility will expand and the need for supervision will decrease.</p> <ol style="list-style-type: none"> 1. Interface with a variety of stakeholders to provide and instill process safety rigor to ongoing activities, programs, and guidance documents (non-exclusive) 2. Facilitate Simple to Moderate Process Hazard Analyses (PHA's) (note: other Engineers such as Project Engineers also may facilitate these) 3. Act as a PHA Scribe per team's PHA Guidelines document (note: other Engineers also may scribe for Simple to Moderate PHA's) 4. Participate in Pre-Startup Safety Reviews (PSSR's) 5. Participate in facility internal or external audits 6. Participate in Layers of Protection Analysis (LOPA) study to calculate the safety integrity level of a safeguard 7. Assist in simple likelihood/consequence analysis calculations 8. Assist with data gathering, interviews, scribing, and report writing for Apparent Cause Evaluations (ACE's) and Root Cause Evaluations (RCE's). (note: not all ACE's involve Process Safety Engineers) 9. Gather appropriate data for development of Process Safety metrics 10. Assist with development of Process Safety training 11. Participate in process safety culture assessments and assist with improvement activities 12. Assist with assessing Change Control effectiveness 13. Identify and verify pressure relief valve sizing cases, flare system sizing cases and calculate PRV and/or flare system sizes when deemed necessary (note: other groups may perform this work) 14. Participate in Hazard identification (HAZID), Inherently Safe Design (ISD) studies, and other Hazard Identification and Risk Analysis (HIRA) studies. 15. Identify specific human factors/facility siting issues in assessing hazards and identifying safeguards, incorporating input from all other team members
Scope	Resolves problems of basic to moderate scope. Assignments typically require standard solutions. Under general direction, independently plans work to meet assigned objectives; progress is reviewed periodically for technical accuracy and adequacy in process and upon completion.
Interaction	Interacts with Process Safety stakeholders including but not limited to: Maintenance, Operations, Engineering, Construction, Project Management, Health/Safety/Environment, and Codes and Standards.
Job Qualifications :	
Education	A 4-year BS Degree in Engineering from an accredited curriculum in the US or the equivalent from outside the US.
Licenses / Certifications	Current and active California PE license or Engineer in Training (EIT) desired.
Experience	1-2 years of experience in engineering desired. A minimum of three months of experience in Process Safety Engineering is required, for example a summer internship, entry engineer rotation into Process Safety department, or Process Safety work experience at another company. A certificate in Process Safety attached to the BS Degree may substitute for prior Process Safety work experience.

Knowledge / Abilities	<ol style="list-style-type: none"> 1. Able to understand and apply Process Safety Management principles. 2. Able to work with limited supervision and guidance to meet commitments. 3. Demonstrates informed judgment when making decisions and recommendations. 4. Excellent written and verbal communication skills. 5. Works well independently and with others. 6. Uses judgment in applying engineering principles and techniques to determine cost effective and practical solutions. 7. Ability to manage and complete several activities concurrently, depending on scope and complexity. 8. Interprets applicable codes, industry standards and regulations. 9. Can provide thorough analysis of issues and justification of recommendations. 10. Takes ownership of problems and their solutions.
<u>GAS PROCESS SAFETY ENGINEER (52218593)</u>	
Summary	<p>This is a journey-level engineer job that is responsible for performing or leading basic to moderate process safety activities within PG&E Gas Operations. Depending on previous experience with process safety, engineers in this position will gain and enhance a basic understanding of Process Safety Management (PSM) principles. Uses independent judgment in applying process safety principles, working with moderate supervision. Works with and coaches engineers, project managers, construction personnel, and other business partners in assessing process safety needs.</p>
Job Duties:	<p>May perform all the duties of the Associate Engineer and in addition:</p> <ol style="list-style-type: none"> 1. Support development of QRA's and interpretation of QRA results. 2. Coordinate (i.e., primary interface with project or facility lead) Moderate PHAs 3. Coach engineers, project managers, construction personnel, and other business partners in assessing process safety needs. 4. Evaluate effective implementation of safety processes, procedures, and considerations. 5. May support Apparent Cause Evaluation's (ACE's) (note: CAP group, supervisors, field employees etc. may also perform this function) 6. Acts as a Process Safety coach and reviewer for changes (per Change Control procedure) 7. Participate in assessing Change Control effectiveness and identify opportunities to improve
Scope	<p>Resolves problems of basic to moderate scope. Assignments typically require standard solutions. Under general direction, independently plans work to meet assigned objectives; progress is reviewed periodically for technical accuracy and adequacy in process and upon completion.</p>
Interaction	<p>Interacts with and coaches Process Safety stakeholders including but not limited to: Maintenance, Operations, Engineering, Construction, Project Management, Health/Safety/Environment, and Codes and Standards.</p>
Job Qualifications :	
Education	<p>A 4-year BS Degree in Engineering from an accredited curriculum in the US or the equivalent from outside the US.</p>
Licenses / Certifications	<p>Current and active California PE license or Engineer in Training (EIT) desired.</p>
Experience	<p>Demonstrated knowledge and ability to perform the basic duties of the Journey Level Engineer. Meets specific technical job-related requirements gained through a minimum of three (3) years of cumulative and relevant experience in process safety, engineering, design and/or operations.</p>
Knowledge / Abilities	<ol style="list-style-type: none"> 1. Able to understand and apply Process Safety Management principles. 2. Able to work with limited supervision and guidance to meet commitments. 3. Demonstrates informed judgment when making decisions and recommendations. 4. Excellent written and verbal communication skills. 5. Works well independently and with others. 6. Uses judgment in applying engineering principles and techniques to determine cost effective and practical solutions. 7. Ability to manage and complete several activities concurrently, depending on scope and complexity. 8. Interprets applicable codes, industry standards and regulations. 9. Can provide thorough analysis of issues and justification of recommendations. 10. Takes ownership of problems and their solutions.

GAS PROCESS SAFETY ENGINEER, Senior (52218594)	
Summary	This is a senior-level engineer job that is responsible for leading moderate to complex process safety activities within PG&E Gas Operations. Applies and imparts extensive knowledge of concepts, principles, and practices to resolve complex problems with only general direction.
Job Duties:	<p>May perform functions of Journey level Engineers and in addition:</p> <ol style="list-style-type: none"> 1. Facilitate and coordinate (i.e., primary interface with project or facility lead) Complex PHAs. Analyze PHA findings and assist stakeholders in identifying and addressing systemic issues 2. Take a lead role as Process Safety representative in facility internal or external audits 3. Lead Layer Of Protection Analysis (LOPA) studies in relation to PHAs (note: this refers to the semi-quantitative analysis of layers of protection to determine their effectiveness, considering enabling conditions, conditional modifiers, probability of failure on demand, safety integrity level, and calculation of the initiating event frequency, ultimately resulting in an order-of-magnitude estimation of risk. It does not refer to informal discussions of safeguards or informal decision-making assessments.) 4. May calculate the frequency with modifiers to estimate the likelihood for specific process safety scenarios to evaluate risk. This will be used for Quantitative Risk Assessments (QRA) while combined with consequence modeling. 5. Calculate the physical effects of consequence for specific process safety scenarios using PHAST or spreadsheets to evaluate risk. This is with respect to facility (compressor stations, gas processing platforms, storage fields, and gas terminals) risk assessments. 6. May support the interpretation of quantitative risk assessment (QRA) results and provide technical inputs on the mitigation action plan. 7. Conduct Gas Plume Dispersion Consequence modeling using appropriate software for facility siting purposes as well as supporting the hazardous area classification (HAC) study. 8. Analyze Process Safety metrics generated by the Process Safety Organization to identify systematic issues and assist with improvement plans 9. Develop and deliver Process Safety training across Gas Operations 10. Facilitate appropriate improvement activities based on results of process safety culture assessments (note: business owners may choose to facilitate these improvement activities on their own) 11. Lead development of Process Safety procedures and guidance documents. 12. Perform process safety risk assessments for emerging issues and develop a mitigation plan with support from the line of business 13. Verify process safety elements of hydraulic analysis/sizing basis of appropriate pressure relief valve, flare and depressuring cases (note: other groups may perform this work) 14. Identify ISD design options, applying ISD strategies, incorporating input from all other team members (Note: business owners may choose to do this without Process Safety assistance) 15. Identify appropriate design options to address human factors/facility siting issues, incorporating input from all other team members 16. May support improvement activities for Change Control (Note: other employees such as Gas Safety Excellence team may lead these activities) 17. Contribute to the development of company standards, specifications, and guidelines 18. May lead Apparent Cause Evaluation's (ACE's) (note: CAP group, supervisors, field employees etc. may also perform this function)
Scope	Resolves problems of moderate to complex scope. Assignments may provide an opportunity for creative or non-standard approaches. Under general direction, independently plans work to meet assigned general objectives. Work may be reviewed upon completion.
Interaction	Interacts with and mentors Process Safety stakeholders including but not limited to: Maintenance, Operations, Engineering, Construction, Project Management, Health/Safety/Environment, and Codes and Standards.
Job Qualifications:	
Education	A 4-year BS Degree in Engineering from an accredited curriculum in the US or the equivalent from outside the US.
Licenses / Certifications	Current CCPS Process Safety Professional Certification desired. Current California PE license desired.

Experience	Mastery of the Journey level Engineer job duties and demonstrated knowledge and ability to perform the basic duties of the Senior level Engineer. Meets specific technical job-related requirements gained through a minimum of eight (8) years of cumulative experience in process safety, engineering, design and/or operations, of which four (4) years must have been spent in a position(s) primarily focused on process safety activities.
Knowledge / Abilities	<p>Demonstrate knowledge and abilities required for the Journey level Engineer and also:</p> <ol style="list-style-type: none"> 1. Able to apply layer of protection strategies and identify risk reduction options 2. Demonstrate ability to handle multiple large scale and complex activities without supervision. 3. Excellent interpersonal and communication skills. 4. Demonstrate good presentation skills including knowledge transfer presentations. 5. Complete assignments of broad scope and complexity. 6. Ability to integrate information from a variety of sources. 7. Ability to lead process improvement initiatives.

	<p><u>GAS PROCESS SAFETY ENGINEER, Senior Consulting (52219259)/Advising (52218595)</u></p>
Summary	This is a senior consulting/advising level engineer job that requires mastery of one or more of process safety focus areas and is responsible for leading complex process safety activities within PG&E Gas Operations. The Senior Consulting Engineer applies extensive knowledge of concepts, principles, and practices to resolve complex problems with only general direction. Researches and identifies practical solutions to highly complex problems. Identifies and facilitates opportunities and brings in ideas to help improve company performance.
Job Duties:	<p>May perform the functions of Journey and Senior level Engineer and in addition:</p> <ol style="list-style-type: none"> 1. Identify complex layer of protection strategies and lead complex LOPA studies (simple, moderate, and complex as defined in a future procedure with agreement by ESC and Management) 2. Support the development of criteria for robust layers of protection to ensure their required Safety Integrity Levels (SIL) or Probability of Failure on Demand (PFD). 3. May conduct complicated consequence analyses 4. May instruct others in consequence analysis 5. May lead Root Cause Evaluations (RCE's) (Note: other employees such as CAP team may lead RCE's as well) 6. May instruct/mentor others in Hazardous Area Classification 7. May instruct/mentor others in pressure relief, depressuring, and flare systems 8. Address complex pressure relief and flare scenarios (note: other groups at PG&E may also do this) 9. Instruct/mentor others in Inherently Safer Design (ISD) 10. Identify and apply complex ISD strategies 11. Instruct/mentor others in human factors from a process safety perspective 12. Instruct/mentor others in facility siting from a process safety perspective 13. Provide training and technical guidance to other Process Safety engineers across Gas Operations 14. Provide guidance and technical expertise to management on application of process safety risk reduction approaches 15. Instruct/mentor others in LOPA and all other Process Safety analyses and studies, which is best served by in house expertise 16. May lead improvement activities for Change Control (Note: other employees such as Gas Safety Excellence team may lead these activities)
Scope	Resolves problems of very complex scope. Serves as a key technical resource within area of focus. Regularly expected to apply creativity or new approaches to assignments that may be unique. May lead others on technically complex projects. Customarily and regularly uses discretion and independent judgment in fulfilling these job functions.

Interaction	Interacts with and mentors Process Safety stakeholders including but not limited to: Maintenance, Operations, Engineering, Construction, Project Management, Health/Safety/Environment, and Codes and Standards.
Job Qualifications:	
Education	A 4-year BS Degree in Engineering from an accredited curriculum in the US or the equivalent from outside the US.
Licenses / Certifications	Current CCPS Process Safety Professional Certification desired. Current California PE license desired.
Experience	Mastery of the Journey and Senior level engineer job duties within one or more Process Safety focus areas and demonstrated knowledge and ability to perform the basic duties of the Senior Consulting Level Engineer. Meets specific technical job-related requirements gained through a minimum of thirteen (13) years of cumulative experience in process safety, engineering, design and/or operations, of which seven (7) years must have been spent in a position(s) primarily focused on process safety activities.
Knowledge / Abilities	Demonstrates knowledge and abilities required for the Journey and Senior level Engineer and also: <ol style="list-style-type: none"> 1. Able to handle multiple large and complex activities without supervision and serve as team leader. 2. Able to provide leadership, direction, and assistance to engineers and designers. 3. Excellent interpersonal and communication skills. 4. Able to complete complex assignments with few or no precedents or standards. 5. Able to apply extensive knowledge of concepts, principles and practices in a specific field or area of expertise to resolve complex problems.

	<u>GAS PROCESS SAFETY ENGINEER, PRINCIPAL (52218596)</u>
Summary	<p>This is a principal level Process Safety engineering position. This position is responsible for providing Process Safety support for the most complex projects in Process Safety. Possible projects include, but are not limited to: Qualitative Risk Assessment, Quantitative Risk Assessment, Field Process Safety Support, and Incident Investigations.</p> <p>The individual in this role will be recognized as an industry expert at PG&E. This individual actively shares knowledge through technical leadership and coaching.</p>
Job Duties:	<p>May perform the functions of Journey, Senior, and Senior Consulting/Advising Engineer and in addition:</p> <ol style="list-style-type: none"> 1. Leads large, highly complex (multi-discipline, multi-group) projects and roll-out implementation 2. Performs technical analyses, studies, and develops data and recommendations for enhanced decision-making 3. Performs Quality Assurance (QA) on technical aspects of Process Safety deliverables and effectiveness 4. Leads development , implementation, and delivery of process safety focus area(s) and their continuous improvement 5. Routinely called upon by Management to provide advice or leadership on Process Safety issues 6. May act as a company witness, liaison, and/or information provider to outside parties regarding technical process safety matters. 7. May represent PG&E with regulatory agencies and at external industry associations, committees, trade organizations and other inter-utility groups regarding technical process safety matters.

Scope	Resolves complex issues. Serves as a key technical resource and consultant within area of specialization. Regularly expected to apply creativity or new approaches to assignments.. May lead others on technically complex projects. Customarily and regularly uses discretion and independent judgment in fulfilling these job functions under general direction of Management
Interaction	Externally, establishes and maintains good relations with counterparts in other groups within the Company and higher level representatives in third party organizations, e.g., governmental, regulatory, business partner or community entities, using skilled negotiation, tact and diplomacy. Internal contacts include company management across various departments. Often is a technical coach for others. May participate in professional affiliations (e.g. ASCE, ASME, AGA) to keep abreast of new industry trends, developments and procedures. May represent the company on industry association committees.
Job Qualifications:	
Education	A 4-year BS Degree in Engineering from an accredited curriculum in the US or the equivalent from outside the US.
Licenses / Certifications	Current CCPS Process Safety Professional Certification desired. Current California PE license desired.
Experience	Mastery of the Journey, Senior, and Senior Consulting level engineer job duties and demonstrated knowledge and ability to perform the basic duties of the Principal Level Engineer. Meets specific technical job-related requirements gained through a minimum of fifteen (15) years of cumulative experience in process safety, engineering, design and/or operations, of which ten (10) years must have been spent in a position(s) primarily focused on process safety activities.
Knowledge / Abilities	Demonstrates knowledge and abilities required for the Journey, Senior and Senior Consulting level Engineer and also: <ol style="list-style-type: none"> 1. Takes ownership of problems and their solutions. 2. Demonstrates expert level knowledge in at least two Process Safety areas, per definitions: <ol style="list-style-type: none"> a. Qualitative Risk Assessment (PHA) b. Quantitative Risk Assessment (QRA) c. Process Safety Field Support (MOC/ SWP/ JSSA/ JHA/ PSSR) d. Incident Investigations (RCE/ ACE) 2. Apply extensive knowledge of concepts, principles and practices to solve complex problems 3. Provides internal consulting (SME support) for PG&E in the areas of expertise 4. Able to handle multiple large complex projects with limited oversight 5. Provide leadership, direction, and assistance to engineers and designers. Coach and develop