



Novel Coronavirus Pandemic Operational Practices and Lessons

AUGUST 2020

Prepared by IGU Public Affairs in collaboration with



Contents

Introduction and Background	pg.4
Summary Issues Checklist	pg.5
Section I: Crisis Management Structures and Recovery	
1.1 Crisis Management Structures	pg.7
1.2 Post Pandemic Recovery	pg.9
1.3 Post Pandemic Incident Review	pg.10
Section II: Operational Measures	
2.1 Prevention and Control Methods for Employees	pg.11
2.2 Rotating Shift Considerations	pg.12
2.3 Protection of Customers	pg.12
2.4 Prevention and Control Measures for Offices	pg.13
2.5 Prevention and Control Measures of Work Sites	pg.13
Section III: Site Specific Pandemic Planning	
3.1 Critical and Essential Office Facilities	pg. 16
3.2 Company Vehicles	pg. 17
Section IV: Information Technology	
4.1 Information Technology Sustainment & Protection	pg. 19
Section V: Public Relations & Communications Strategies	
5.1 Public Relations	pg. 21
5.2 Internal and External Communications Strategies	pg. 23

Introduction and Background

The COVID-19 Pandemic is imposing vast global health and economic consequences. IGU members have developed contingency plans to ensure that essential services that are required for the flow of natural gas to their markets and users can continue without interruption, while keeping the public and their employees safe.

Beyond internal plans, many member organizations are stepping up to contribute to the overall response efforts by producing disinfectants, providing material or monetary support to those in need, and introducing more leniency to payment and disconnection policies.

The IGU developed the Operational Practices and Lessons document to assist members during this crisis. This is a restricted member-only publication, which we ask to keep internal to your organizations', and not redistribute without the explicit consent of IGU's Public Affairs.

This document has been developed using the materials kindly shared with us by the IGU's valued, extensive global member network of energy professionals. It provides insight to operational adjustments and leading practices that are being undertaken to ensure that the system, employees, and customers remain safe through the crisis and uninterrupted service continues.

This document includes:

- **Leading practices for revising operational procedures and responding to the crisis**
- **Considerations for restoring operations and recovering post-crisis, as societal emergency measures begin to be lifted.**

This Document does not include:

- **Specific pre-pandemic planning guidelines, which are typically embedded in the organizational Business Continuity Planning process.**

Summary Issue Checklist

This checklist provides a quick guide to the essential considerations in case of a health emergency, like the Covid-19 pandemic. This short exercise can help get your organization started in navigating through the challenging time for a safe, cost-effective operation, and ultimately toward reopening.

Leadership

Has your company developed emergency management and oversight capabilities necessary to manage through the pandemic?

Critical considerations for this question include:

- The company has an emergency governance structure and a clear procedure for activating it in the time of crisis
- The company has established and communicated their corporate vision for the emergency planning process and for managing within a COVID-19 environment.
- An informed and trained executive team with appropriate authority and responsibility in a management structure can be formed to execute oversight of all essential company functions, as well as new functions now required by the pandemic.
- Employees with diverse business backgrounds and experience are involved in critical phases of the planning process.
- The company has established a cross-function decision-making body for Emergency Operations to manage company-wide health concerns, and/or COVID-19 outbreaks within the geographic areas of the company.
- The company has developed points of contact with local public health officials and local healthcare centers in order to communicate, coordinate, and execute plans for risk mitigation and community outbreak.
- The company's leadership ensures their operations center and/or planning groups actively monitor and survey local, regional, national, and international official and media sources for accurate, up to date COVID-19 information.
- There is a clear and efficient strategy for coordinating across workgroups. This strategy can include frequent meetings between workgroups, clearly defined responsibilities, and channels for internal and external timely, mission aligned communication throughout the process.
- Crisis management structures and business continuity plans, including corporate communication plans and protocols are in place

Safety

Does your company have sufficient health & safety materials and protocols to address the unique challenges of COVID-19?

Critical considerations for this question include:

- An adopted approach to developing and monitoring both company and government COVID-19 alert and risk levels.
- Infection control strategies which would include testing, contact tracing, cleaning, quarantining, and other necessary steps, as outlined by the health authorities, for all areas of the company.
- Establish supply chains for personal protective equipment (PPE), develop physical distancing policies for company facilities and work sites. Consider a process to gain access to external health facilities, as needed.
- Establish measures to provide the protection of staff, customers and the general public.

Employees

Has your company developed an employee support program? (Whether fully on-site, online, or hybrid of both)

Critical considerations for this question include:

- Health and safety strategies including the availability of trained staff for offerings that enable employee's access to appropriate counseling and advice.
- Corporate plans to introduce adjusted work processes to accommodate health and safety protocols.
- Deliver revised HR policies and protocols with identified resources for implementation.
- The company has developed strategies to ensure equality and accommodate employees with special needs.

Financial

Does your company have sufficient financial resources and sustained financial capacity to address the unique challenges of the pandemic?

Critical considerations for this question include:

- The company has assessed the financial impact of unforeseen COVID-19 circumstances.
- The company has conducted comprehensive financial planning to ensure that it has sufficient funding for new materials, equipment, protocols, information technology support and supply chain issues.
- Ensure there are financial reserves for at least the coming year, for unforeseen emergency situations. (Natural disasters, system interruptions etc.)

Section I: Crisis Management Structures and Recovery

1.1 Crisis Management Structures

In order to more efficiently deal with COVID-19, some organizations have set up a Pandemic Response Team, which supports their corporate and regional crisis management teams. Those teams in turn manage the status of the current crisis situation in their area and supply communication strategies, informational health and mental health guidance and support.

The Pandemic Response Team and the Corporate and Regional Crisis Management Teams are staffed with technical, operational, health & safety and communications experts, and their task is to support their existing Tactical Operations Teams. An example of an organizational crisis management structure is shown below.



This is a top-down crisis management structure. Strategic level of senior leaders provide direction and develop company policies that will guide the organization in achieving its goals during an emergency situation. Then, Operational level of management, technical staff and subject matter experts with defined roles and responsibilities, support and help organize the effort to achieve the goals set by the Strategic Level. Finally, the Tactical Level that is made up of field management and technical staff to implement and deliver by organizing personnel and resources to safely achieve the goals.

Nimble management response structures require small teams of well-trained leaders who are knowledgeable in organizational policy. This enables quick assessment of local situations, efficient communication, and rapid situational adjustments as required during the crisis.

Below are some of the key leading practices from the IGU members related to the COVID-19 crisis management.

» **Develop a COVID-19 Alert Level System in order to simplify the range of operational approaches.**

Many companies identified three or four COVID-19 Alert Levels to indicate the severity of COVID-19 transmission and implications for company operations. Most companies would move from a Very High Alert to High Alert to Low Alert, as their respective areas are reopening. However, it is important to be prepared to move quickly between Alert Levels, if the COVID-19 transmission rate changes in their area or community. Strict attention should be paid to state and local mandates, which could supersede these Alert Levels. It is also critical to recognize that the state of COVID-19 transmission can vary greatly from community to community.

» **Develop effective internal information sharing and communication strategies and tactics.**

Utilize a variety of communication strategies to effectively relay the critical information, on site meetings video conferencing, virtual live sessions.

Share not only the technical information during an emergency situation, but also include considerations for the physical and mental health guidance and support.

Most Incident command structures will stand up to pandemic safety distance restrictions.

» **Cross-Border Coordination**

Be involved as much as possible in the development of preparedness plans and cross-border coordination of technical staff between regions and countries.

» **Response Crews**

Response to an emergency situation would now involve fewer people, but crews must possess pandemic specific PPE and mitigation methods.

Response crews should be remotely staged, and managed and supported remotely as well.

» **Collect Information and document new knowledge**

Post COVID-19, the experiences, learnings and best practices from this crisis should be well documented, analyzed, and synthesized into future pandemic preparedness procedures.

1.2 Post Pandemic Recovery

This section lists considerations for recovery planning, post COVID-19.

» **Staged recovery process**

The post-recovery operation should be restored through a series of carefully planned,

graduated steps that will bring the workforce back to full activity in a measured way, to ensure a smooth transition and contingency allowances.

Increased opportunities to work remotely can be actively considered as an every-day tool where it benefits staff and productivity.

HR policies will most likely need to be reviewed and updated on an organization-by-organization basis.

» **Reassessment and revision of operational procedures may be needed**

Reassess how field personnel work and interact with customers and the general public. A number of changes to Standard Operating Practices (SOPs) may have to be implemented permanently.

Increased use of virtual technologies will most likely affect travel as well as the associated costs, i.e. less travel may result from more people being familiar and comfortable with the efficiency of virtual meetings.

» **Ensure your facilities are compliant with current safety and official protocols.**

Ensure any existing mutual assistance plans are updated to reflect the current environment.

» **Safeguard the security of the gas supply with the adoption of national pandemic action plans and emergency plans for the sector based on national and regional risk assessments.**

1.3 Post Pandemic Incident Review

» **Utilize a post pandemic incident review process that will evaluate and assess the company's overall performance during the crisis.**

Determine the key players who should attend the review as well as establishing a timeline identifying the major events that occurred.

During the incident review discuss and document, what went well during the pandemic, as well as areas of improvement.

With an incident of this magnitude it would not be uncommon to hold incident reviews representing many key departments of the company in order to capture the learnings from each affected area. Consider the attendees at the review represent all key players who were responsible for most of the key decisions made and a sampling of those most affected.

After the review develop an incident review guidance document for the company, which would be utilized as part of the preparation and preparedness planning for future pandemics including training, awareness, SOPs, appropriate stocking levels of PPE, test kits, HR policies, operating procedures etc.

Section II: Operational Measures

Protecting Employees and Customers

The gas industry has the highest level of safety expertise, as that is the backbone of its license to operate. However, during a pandemic, it is necessary to consider and adopt a series of prevention and control measures, corresponding with the specific requirements of the national and local governments. These measures should be designed in such a way, as to further protect the health and safety of customers and the workforce, while guaranteeing uninterrupted supply. Key Considerations are listed below.

2.1 Prevention and control measures for employees

- Appropriate individual PPE (personal protective equipment) should be available to all employees along with training on their use and when they are required. This PPE should be required to be worn in order to access the workplace.
- Employee contact tracing and pre-health screening system could be established in regions impacted by the epidemic, as well as their contact with confirmed and suspected cases.
- Returning employees from other localities should strictly obey related epidemic prevention requirements of the local governments, such as testing, quarantine, and isolation measures. Centralized quarantine could be an option, if it is necessary.
- Employees should monitor their body temperature before coming to the office or workplace. If their body temperature shows above 37.3C, the employee should stay home and report to his/her supervisor and work from home, if possible. In order to monitor the occurrence his/her supervisor should immediately report the incident to the organization's administration seeking further professional advice or instruction.
- In case an employee's family members or cohabitants show any symptoms of COVID19, the employee should stay home and report to his/her superior and work from home. His/her supervisor shall immediately report the incident to the organization's administration seeking further professional advice or instruction.
- Develop home isolation/quarantine and monitoring procedures to support employees and ensure their safe health status before return to work.
- Monitoring, accurate reporting, and efficient isolation of infection cases is essential to preventing outbreaks amongst the workforce.
- Developing a COVID testing program adds another level of safety.
- Predictive modeling of COVID-19 spread can impact management's operational decisions for each location. As the level of illness can be different for each location due to the localized spread.



2.2 Rotating shift considerations

- Consideration should be given to splitting employees into rotating shifts. For example, a day shift, afternoon shift, and/or an evening shift, if deemed necessary. Staggered start and finish times would reduce exposure at the busiest commute times and would assist in physical distancing, in order to reduce the risk of contamination.
- It is suggested that the employees should reduce taking public transportation, where possible. Walking, cycling, and driving are encouraged to reduce the chance of exposure.

2.3 Protection of Customers

- Residential customers utilizing the gas network should be informed by "Notification" or "Public Announcement" that services, like indoor security checks, door-to-door meter-reading, first-time gas supply trial, and indoor piping renovations etc. could be suspended during the pandemic.
- Self-service gas vending machines are an option to encourage users to purchase gas via the Internet, or gas vending machines to reduce OTC businesses and to control the access of personnel into the place of business, and to minimize contact with users.
- Where possible, contactless services to avoid potential cross-contamination should be provided to users, e.g. mobile phone applications and ATMs to provide services including online metering, gas purchase and payment to satisfy customers' demand.
- Entry into customer premises of any kind should be limited to only essential work. In some cases, where a premise must be entered, the occupants should be asked to leave the premise in question, or at a minimum, move to a different, separate area of the premise.
- Employees or contractors who must enter a premise and were unable to maintain a minimum 2m clearance to occupants are required to use PPE. At a minimum, masks should be worn when entering a customer premise.
- Employees should be instructed to follow sanitary protocol, such as hand washing.



2.4 Prevention and control measures for offices:

- Physical meetings should be reduced to critical minimum, with one-to-one communications, while meeting conference calls and video conferences should be encouraged as substitute.
- Office work stations/equipment and frequently touched surfaces should be cleaned, well ventilated and disinfected on a regular basis.
- If more than one person is working in the same room, physical-distancing along with wearing proper PPE should still be maintained. When the distance between employees is between 1-2 meters, a wall or partition should be installed to reduce the chance of spread. When the distance is greater than 2 meters, protective barriers could be relaxed, as long as proper PPE is available.
- Where possible, physical barriers should be installed between close workstations. Many operators have been option for clear white plastic dividers.
- Ensure safe air handling systems are functioning well, and consider upgrading ventilation system if applicable.
- One to two-meter isolation lines should be set up in elevators and cafeterias and time-sharing eating measures should be adopted. Where the minimum distance is difficult to maintain, face coverings should be required.



2.5 Prevention and control measures of work sites:

- Where possible, preference should be given to electronic patrol and inspection technologies, such as telemetry equipment, mobile leakage detection, drones, etc. Physical patrol and on-site inspection of facilities or work activities should be conducted in critical situations, to lower the risk of infection. I.e. gas odour or leak investigations.
- Consideration should be given to controlled access and egress of maintenance or construction work sites deemed only to be of a critical or essential operation. It is suggested work crews should be from the same work center and not substituted from other geographical areas or crews, if possible.
- Physical distancing procedures for work activities requiring more than one employee should be developed, adequately trained and monitored on a regular basis to ensure employee safety and safety to the surrounding public is maintained.
- At production and operation service centres, personnel should adopt staggered start and finish times, in order to minimize groups gathering in the workplace or departure areas.
- When working individually, or as a crew, proper PPE availability including anti-fog goggles are critical. Minimum PPE usage procedures must be developed, adequately trained and monitored on a regular basis, to ensure employee safety and safety to the surrounding public.
- Morning field meetings to convey safety information or work procedures can be conducted virtually, or at established field station sites.
- Underground line locating services for 3rd party construction will likely not be required as frequently during the pandemic. This important operational safety service should continue with staff or contractors equipped with proper PPE and following physical distancing procedures.



- Emergency response may require fewer people, as damages should be lower due to lower construction activity. Response crews should be remotely staged before entering the affected area to keep physical distancing supported with supplies remotely. Existing company Incident command structures should be reviewed to ensure they are appropriate in these situations.
- Emergency crews should be available for mobilization 24/7, with considerations to produce a team of up to ten responders to carry out emergency repairs and maintain continuity of supply in a region.
- To reduce personnel exposure in field stations, shifts may be extended from 8 hours to 12 hours daily. A reduction in the amount of staff allowed in each shift, should be considered giving the means to work remotely from home.
- Consider daily screening of workers health conditions where each worker report in a daily survey the presence of warning health conditions such as fever, throat pain, if exposed to external personnel, among others.
- Each field reporting site should aim to use infrared thermometers to measure the body temperature of the personnel before entering.
- Adjust emergency response procedures to include the assessment of required PPE for the specific type of work being performed for all personnel involved.

Section III: Site Specific Pandemic Planning

3.1 Critical and essential office facilities (i.e. control centers/call centers/emergency call centers/planning and dispatch centers)

- Centralization of PPE procurement and distribution is best to maximize effective and efficient allocation and product consistency.
- Remote working from home policies should be adopted for those roles where it is deemed practical. Additional laptop and office supplies should be available.
- PPE procedures and education on masks, gloves and other face coverings use should be developed specifically for each department's application, along with a sufficient supply.
- For employees who can work from home ergonomic considerations should be included for employees having special needs.
- Flexible work schedules should be considered, to accommodate for other personal and family responsibilities to incorporate in their work day.
- Hand cleaning procedures should be widely emphasized and wash stations easily available to employees.
- Physical barriers and people traffic procedures such as sneeze-guards installed, limited entries and exits to reduce foot traffic, no queuing allowed in some areas will help reduce the risk of spread.
- Consoles in control rooms should be cleaned and disinfected after each shift. Inside the control rooms, staff are limited to only the controllers, excluding cleaning staff.
- Temperature screening on entry at the beginning of each shift can help track illness. Back-up control room staff should be adequately trained and kept on standby, in the event of an outbreak.
- At core offices a medical center could be supplied where monitoring the daily health conditions of the workers including taking the body temperature could be provided.
- Employees working in critical or essential facilities could be assigned exclusive transport to and from the control rooms. Each vehicle must pass through a strict cleaning and disinfection protocol before and after each service.
- To reduce the concentration of personnel in the Main Control Room, the backup MCR can be made operable for the simultaneous operation.
- For administrative facilities, a flexible workday strategy could be maintained such as implementing work shifts combined with remote work from home. This measure is with the aim to reduce the capacity allowed at the offices and to assure a minimum distance of 2 meters between workers.
- For added safety of employees, additional measures such as making physical modifications to the offices, definition of transit pathways for a specific



direction, signaling, installation of portable hand washing stations and new rules of the usage of common areas, among others could be considered.

- Perform periodic COVID-19 testing, as needed.
- In isolated locations, such as offshore platforms, pre-confinement of staff before accessing the premises and action plans, including early detection and evacuation measures, may need to be put in place.
- All personnel who have had past experience as control room operators, may be retrained in the operation of the control rooms. With this measure a known count on backup personnel is available in case of detecting any contagion in the control room.

3.2 Company Vehicles

- Dedicating the use of company vehicles to assigned individuals with no passengers is preferred where possible and would assist in the disinfection process.
- Disinfection procedures of all vehicles and equipment should be developed and monitored to ensure it is being carried out.
- Disinfectant and cleaning supplies should be readily available to individuals to clean vehicles and equipment before and after use.
- Hand sanitizer should also be supplied in each vehicle.
- Use of rental equipment should follow the same disinfection procedures as vehicles and standardize the rental location where possible.
- Vehicle take home policy should be utilized with some modifications to the commute policy, to allow individuals to take company vehicles home.
- Vehicles assigned for the exclusive transport for personnel working at the control rooms should pass through a strict cleaning and disinfection protocol before and after each service.

Section IV: Information Technology Sustainment & Protection

It is important for energy companies to provide a robust technology infrastructure that scales to support the move to online socializing, learning and working while ensuring the security of remote operations. Large and small organizations fall on a spectrum, from centralized to decentralized IT, but should establish structures that ensure communication across all IT units and are consistent with IT security policies and services related to the pandemic.

- Information about the company COVID policy should be available electronically to the public, to convey the organizations commitment to the health and welfare of their employees and the public. Communication strategies will also be shown concerning enhancements, changes or emphasis to relevant company policies.
- External web sites, which have been approved by the official health authority organizations, such as the World Health Organisation, or official Government information sites, can be provided as additional resources and approved by IT security to ensure employees are only obtaining safe and reliable medical or health information.
- Ensure VPN capacity was increased to account for employees working remotely. Test your network to ensure the availability from outside is safe and secure. Also, ensure the internal platform allows for a surge in concurrent online meetings.
- Ensure all internal security approvals are obtained for all essential persons, working in select remote offices or at home.
- Company cell phones can be assigned with hotspot capability activated to provide secondary connectivity, if needed.
- Contract for wider mobile phone and connectivity plans for workers needing the service.
- Ensure IT Security has reviewed and approved any new external communications systems to be utilized; i.e., telemetry, measurement devices, remote valve operators etc.
- Enable approved electronic Signature software to allow persons to sign documents remotely.
- Consider virtual IT training sessions to assist teams working and meeting remotely and to refresh their cyber security awareness.
- Ensure the organizations information security process is ramped up to protect user identity via (Multi-Factor Authentication) and protection of devices accessing the network to enhance Cyber security.
- Consider an Online COVID-19 Screening questionnaire (employees, contractors and visitors).
- Identify rostered essential IT staff available 24/7 in the infrastructure and telecommunication units for maintenance and critical activities.
- Enable digital inboxes for invoice receiving, reducing the amount of physical documentation at the offices.
- Make cyber awareness and cyber threat status topical issues as part of government-industry briefings that would normally only have been focused on physical security.

Section V: Public Relations & Communications

5.1 Public Relations & Community Support

Beyond the internal plans to deal with COVID-19, many member organizations are stepping up to contribute to the overall response to the pandemic. Listed below are some of the public activities that IGU members are undertaking to assist local governments and municipalities in their efforts to deal with the pandemic.

» Ensure the energy sector is declared as an essential service by government agencies.

» Initiate a mental health awareness drive.

A series of communications was released on company internal platforms, as well as social media channels. The information comprised of daily, comforting well-wish greetings and little nuggets of advice and comforting words to remind all to keep well physically, mentally and emotionally during these times

» Technology and innovation for the public good

In supporting a local need, this organization worked towards developing a prototype of a device to maintain continuous positive airway pressure. This technology helps lessen the dependency of COVID-19 patients on ventilators. The machines were developed in partnership with the energy company, private design company and a local university.

» Public Service Announcements

Preparation of public service announcements in local media, with tips to support local medical instructions dealing with COVID-19.

» Financial support

Monetary contribution towards the purchase of medical equipment. It could include hospital beds, shoe covers, disposable gowns, coveralls and lab equipment. Hand sanitizers were also supplied to selected senior citizen homes.

Waive the gas charges for all government hospitals that consume natural gas. The gas charges could be waived for a predetermined period of time.

Expanded and flexible payment options for large suppliers should be considered.

Halt meter reading and issuance of residential gas bills for a pre-determined period of time.

» In-kind materials donations

A company donated supplies of polypropylene to Universities to produce over 300,000 face shields for government hospitals, clinics and front liners nationwide.

Consider offering a fuel discount at gasoline service stations in hard-hit areas, to uniformed delivery riders, to help offset the transportation costs of food and delivery orders, bus drivers and to first responders and food banks.



» **Community Aid**

Disburse food and aid to families in remote or highly contaminated areas.

Distribute humanitarian aid in the form of monetary food bonds. These would be handed over to the most vulnerable communities in the company's area of influence.

Monetary and/or materials support to local homes for the elderly.

» **Front-line workers support**

Supply water and food items to designated hospitals, and front liners.

Organize automobile service workshops which offered auto services to front liners, including free oil changes.

Donate sanitizing equipment and chemicals to local municipalities and Fire and Rescue Departments for disinfection of buildings and public roads. This could include motorized and hand-spray pumps, sanitizing chemicals, rubber gloves and face masks.

Offer free appliance repair service for medical staff, firefighters, police and other critical agencies.

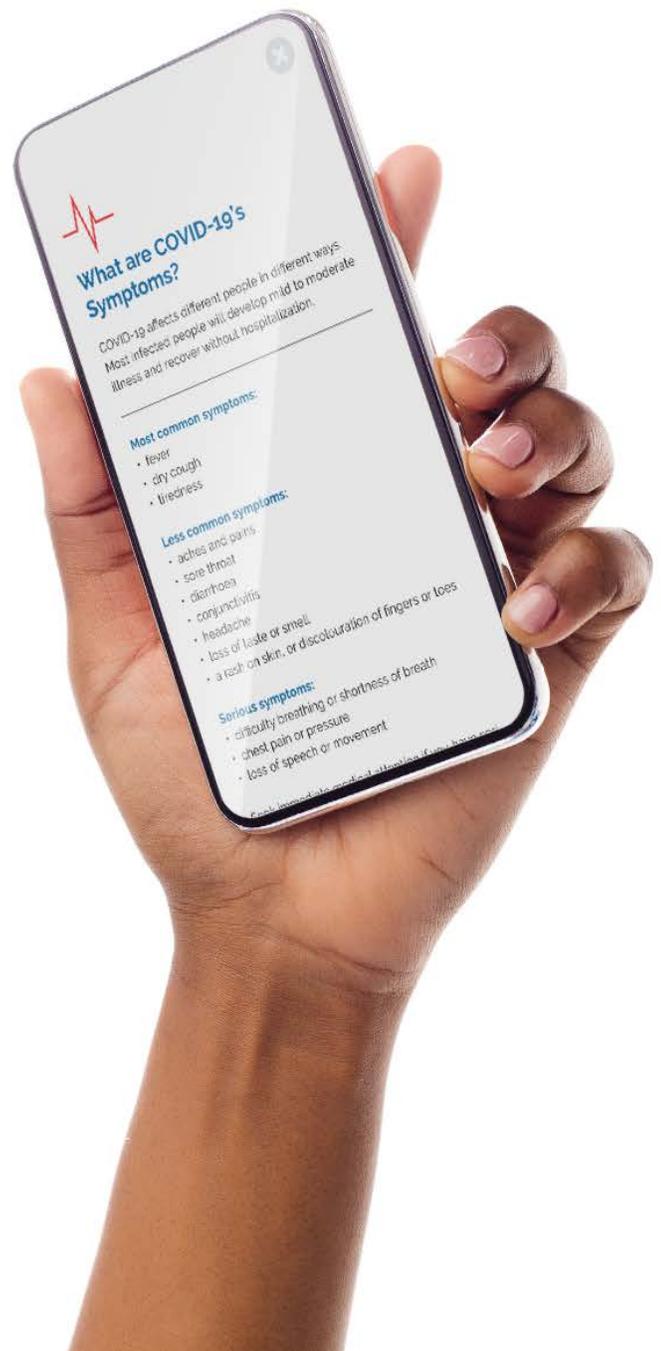
» **Public Relations and Social License**

Provide articles on the energy company's response to the Covid-19 pandemic to daily newspapers, as well as to business journals being published in this period.

Provide guest speakers, to share company expertise, to local TV programs focused on discussions on the COVID impact to business.

5.2 Internal and External Communication Strategies

- Robust crisis communication protocol in place to govern all external communications. This would typically be determined at the strategic preparedness level, and reflected in the business continuity and emergency response plans.
- Clear communication materials and effective plans regarding dissemination of new policies and compliance requirements.
- Clear instructions on the use of equipment and spread prevention measures. Clear signage and premise demarcation, where possible.
- Create a One-Stop Centre internal channel, as the single source of information that keeps staff informed on the pandemic situation and the impact to the business in a timely manner. Employees could utilize the platform to convey support to colleagues globally through tribute and 'thank you' posts with hopes of uplifting each other's spirits. It also could draw more personalized content from employees in staying connected with one another by uploading tips and information concerning how they are adapting to working from home.
- Robust staff communication by Corporate Communication to all staff including field and remote sites through virtual webcasts, conference calls or multiple weekly emails updating the current situations with the best available prognosis for the medium to long term.
- Situation reports from the company Pandemic Team on a daily or weekly basis with stories of the people that keep the system operational and delivering the essential services with reduced numbers of staff.
- Devise and share any collective agreement reached with the local Union organizations related to leave within the framework of the pandemic.





International Gas Union (IGU)

Att: Naturgy,
Plaça del Gas, 1,
Building A 2nd floor,
08003 Barcelona,
Spain

Telephone: + 34 93 412 97 89

Fax: + 34 93 402 54 26

E-mail: secretariat@igu-gasnatural.com

Published by the International Gas Union (IGU) Copyright © 2020. The entire Content of this publication is protected by copyright, full details of which are available from the publisher. All rights reserved. No part of this publication may be reproduced, stored in retrieval systems or transmitted in any form or by any means - electronic, mechanical, photocopying, recording or otherwise - without the prior permission of the copyright owner.