

BEST PRACTICES FOR CONTROL CENTERS TO LIMIT THE SPREAD OF THE CORONAVIRUS

STAFF

- Identify critical staff and minimum staffing levels, to include support staff that might be needed to support assets and systems on site.
- Reinforce proper personal hygiene including hand washing and use of disinfectants
- Discourage face to face meetings – utilize video conferencing, conference calls instead
- Consider use of “Reserve Operators” that could augment staff as operators become unavailable due to illness. This could consist of past operators in new positions, retired operators, etc.
- Reinforce that all illnesses should be reported immediately
- Staff should be encouraged to stay home if they are feeling ill. Consider screening staff for a fever prior to entering the control center. Utilize dispatcher self-screening questionnaire.
- Consider “mutual assistance” relationships with other transmission or generation operators if illnesses significantly affect your staff

INFECTION PREVENTION CONTROL WITHIN THE CONTROL CENTER

- Make alcohol sanitizers available throughout the control center
- Implement enhanced cleaning throughout the control room including common areas such as kitchens and bathrooms as well as individual workstations
 - Require dispatch staff to clean / disinfect workstations including keyboards, mouse, telephone handsets etc. at the beginning and end of every shift
 - Utilize disposable plates/cutlery in control center kitchens to mitigate risk of spreading the virus
- Social Distancing
 - Manage infection risk during shift turnover
 - Consider working 12 hour shifts to reduce the potential for spreading the virus during shift turnover
 - Utilize spare control center work stations when available so that incoming shift can use a “clean” workstation
 - Utilize primary and backup control centers such that subsequent shifts report to the alternate control center - – day shift at site A; night shift at site B with extensive cleaning during at shift locations
 - Dedicate staff to one control center or the other if applicable
 - Where possible keep at least six feet distance during interactions amongst control room staff
- Discourage the use of telephone handsets

- Utilize dedicated headsets for each dispatcher

REDUCE POTENTIAL EXPOSURE

- Limit (eliminate) business travel
- Limit (eliminate) facility tours
- Limit control room access to dispatch personnel only, but consider how to handle support personnel that might need to physically access equipment in an emergency situation. This should be controlled by security staff.
- Break up control room staff into two groups with one group reporting to one control center and the other group reporting to an alternate control center. Alternate operations between the two control centers. Do not mix crews between the two control centers.
- Consider having non-essential personnel work from home or some alternate location to limit interaction with critical staff
- Identify control room staff that has done personal travel abroad or has had a close family member travel abroad and have them work from home for two weeks to ensure they have not contracted the virus
- Develop plans (with identified triggers) to sequester sufficient staff on-site to operate the system around the clock
- Dedicate cleaning/custodial staff to the control center only
- Consider dedicated hotel facilities nearby or trailer accommodations for extended shelter in place operations

CONTROL ROOM STAFF SEQUESTRATION

- There is not a “one size fits all” criteria for determining when to sequester control room staff. The criteria should be part of a larger pandemic response plan that includes, among other things, preventive measures to mitigate risk to control room staff, actions to reduce potential exposure, robust effective cleaning, and staffing plans that exploit social distancing best practices. Sequestering staff can be very disruptive for the personnel involved and their families and given that, the decision to sequester staff should not be taken lightly. Criteria used to make a decision about sequestering staff could include:
 - The rate of infection in the vicinity of the control center and if there is community spreading of the virus.
 - Percentage of the community in the vicinity of the control center infected by the virus.
 - Confirmed infection of control room staff, and if so how many.
 - Number of available and healthy control room staff.
- Logistics to house critical control room staff on-site should be developed in advance and should include bedding, entertainment, laundry services, and dining services. Accommodations for sequestered staff should be designed to promote social distancing and minimize the potential for spreading the virus.

- If sequestering staff is required in part due to infected control room staff, immediately home quarantine all staff that was on shift with the impacted operator.
- Control room staff should be advised in advance to pack a bag with several days of clothes, medications, toiletries and any other essential personal items in case they need to be sequestered on-site for a staffing emergency.
- Consider on-site medical care including appropriate health screening for sequestered staff.

EMERGENCY RESPONSE

- Utilize an executive level crisis management team to monitor the outbreak, assist with coordinating efforts throughout the company and engaging external federal and state agencies as required
- Utilize an operational leadership crisis management team to support operations and report to the executive team.
- Utilize pandemic response processes and procedures

OUTAGE MANAGEMENT

- Coordinate with transmission entities on planned outages that may be impacted by the virus due to personnel or commodity limitations. Adjust operating plans accordingly
- Coordinate with generation entities on planned outages that may be impacted by the virus due to personnel or commodity limitations. Adjust operating plans accordingly
- Coordinate with other industries that may impact critical infrastructure.
- Perform N-1-1 analysis in order to identify potential for unreliable operation in the event generating units become unavailable. Recall transmission outages as necessary to maintain reliability.

RECOVERY STRATEGIES

- Develop and utilize criteria for unwinding or backing out of pandemic specific policies

LESSONS LEARNED

- Leverage lessons learned from China and Europe on the impact and response to the virus
- Capture lessons learned as they may have application to other aspects of business continuity planning
- Reference the NERC 2010 Report and its recommendations on responding to high impact low frequency events at https://www.nerc.com/pa/Stand/Geomagnetic%20Disturbance%20Resources%20DL/HILF_112012.pdf#search=High%20Impact%20Low%20Frequency%20Risk%20AND%20JUNE%202010%20%20%20%20

DOCUMENT MANAGEMENT

This is considered a living document and updates will be made frequently. Suggestions for new Best Practices are strongly encouraged. Contact Paul Dajewski at Paul.Dajewski@pjm.com with any recommendations.