

**PROTECTING WORKERS AND WORK RELATIONSHIPS IN NUCLEAR
FACILITIES FROM CORONA VIRUS (COVID-19)**

حماية العمال وعلاقات العمل في المرافق النووية من فيروس كورونا (COVID-19)

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Abstract:

Labor organizations and workers' organizations around the world have taken a number of measures to protect workers around the world. Whatever the nature of the work.

However, the Corona virus (Covid 19) has presented the world with new challenges, especially the field of work and labor relations that were most affected by this pandemic.

Perhaps workers in nuclear facilities are among those most affected by this pandemic because of the increased risks and threats to their safety, and for this the International Labor Organization and the International Atomic Energy Agency have taken a set of measures to address the Corona virus.

Keywords: ILO, IAEA, Workers, Nuclear facility workers.

الملخص:

لقد قامت منظمات العمل و المؤسسات العمالية حول العالم باتخاذ مجموعة من الاجراءات لحماية العمال في مختلف أنحاء العالم. مهما كانت طبيعة العمل. الا أن فيروس كورونا (كوفيد-19) قد وضع العالم أمام تحديات جديدة، خاصة مجال العمل و علاقات العمل التي كانت أكثر المتضررين بسبب هذه الجائحة.

ولعل العمال في المنشآت النووية هم من أكثر المتضررين من هذه الجائحة لما تزايد عليهم من أخطار و تهديدات لسلامتهم، ولهذا فقد اتخذت منظمة العمل الدولية و الوكالة الدولية للطاقة الذرية مجموعة من الإجراءات للتصدي لفيروس كورونا

الكلمات المفتاحية: منظمة العمل الدولية، الوكالة الدولية للطاقة الذرية، العمال، عمال المنشآت النووية.

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1. INTRODUCTION

The development of the nuclear industry and the widespread application of radiation and nuclear technologies have led to a steady increase in the number of workers who may be exposed to radiation during their work. Workers can be exposed to either artificial radiation or naturally occurring radioactive materials. To protect them from such exposure, some concrete steps can be taken. This includes regular monitoring, protective equipment, or countermeasures such as protection. The agency has a program that focuses specifically on professional radiation protection. It promotes an internationally coordinated approach to this problem and develops safety standards and guidelines for reducing exposure to radiation in the workplace. It also helps member states to apply these standards and guidelines in practice.

In the first half of 2020, the corona virus (COVID-19) has taken over 400,000 lives and plunged the world into the most serious human, economic and social crisis of modern times. In line with the report released by the UN Secretary General in March on “responding to the socio-economic impacts of COVID-19”

However, the pandemic witnessed by the world put the agency and the nuclear facilities in front of a new challenge, which is to protect the workers of nuclear facilities from the risk of contaminating by the Corona virus. The danger of the matter is that the workers of nuclear installations cannot move away from the workplace or work remotely. The precautionary measures of workers for the nuclear installations of the Corona virus are of a special nature. In this research paper we will answer the following question:

- What are the implications of the Corona virus (COVID 19) for work and workers at nuclear facilities?

In this article, we will try to answer this question, with a set of general and particular measures to achieve the required protection.

2. General measures to protect nuclear facility workers and their labor relationships from the corona virus (COVID-19)

The ILO and the Ministry of Labor, Employment and Social Security provide in times of crisis. International labor standards provide a strong basis for key policy responses that focus on the critical role of decent work in achieving sustainable and equitable recovery. These standards and procedures have been adopted by representatives of governments, workers' and employers' organizations, globally. To form a human-centered approach whose aim is to grow and develop, and to protect the relationship between the worker and his place of work, by launching political tools that stimulate demand and protect workers and institutions, and labor relations alike. General measures would protect the worker at the nuclear facility and its working relationship. Because of the quality it carries requires protection, like any other factor in crises and exceptional

circumstances (Allday, 2020).

2.1 The International Labor Organization (ILO) measures

These are specific employment guidance for ensuring decent work in the context of crisis response, including guidelines that may be relevant to meeting COVID-19. As the most recent recommendations for international action and decent work for peace and resilience, which confirm that responses to the crisis ensure respect for human rights including respect for fundamental principles and rights in the workplace and international labor standards (Guy Ryder, 2020)

The International Labor Organization maintains a system on international labor standards that aims to provide women and men with decent work (ILO, 2018), under conditions that guarantee freedom, fairness, security, and dignity (ILO, 1998). Labor standards are a useful measure of decent work in the context of responding to (COVID-19) as follows (Guy Ryder, 2020).

2.1.1 The measures from the World Health Organization (WHO)

To protect workers in the workplace and reduce the direct effects of corona virus (COVID-19), in line with the recommendations and directives of the World Health Organization, and in a manner appropriate to ensure the functioning of the relationship between the worker and the workplace, the most important measures are as follows:

- Improve OSH measures, including social distancing, provision of protective equipment (especially for health and allied workers, volunteers and others in permanent contact with people), hygiene procedures and forms of work organization (supported by information and awareness campaigns), and through social dialogue between employers and workers and their representatives, using for example OSH committees (WHO, 2020, p. 6);
- Encourage appropriate flexible working arrangements;
- Prevent discrimination and exclusion relating to COVID-19;
- Enhance universal access to collectively-financed health services for all, including uninsured workers and their families (WHO, 2020, p. 8);
- Expand access to collectively-financed paid sick leave, sickness benefits, and parental/care leave to ensure income security for those who are sick, quarantined or caring for children, elderly or other family members.

- Stimulate the economy and labor demand through economic and employment policies to stabilize economic activity (ILO, 2018).

- Active fiscal policies, particularly social protection measures, including targeted transfers.

And automatic stabilizers, such as unemployment benefits, along with public investment and tax relief for low-income earners and Micro, Small and Medium Enterprises (ILO, 2017);

- Accommodative monetary policy (interest rate reductions, reserve rate relaxation, targeted liquidity provisions);

- Targeted lending and financial support for specific sectors to protect enterprises, especially MSMEs (ILO, 2017).

2.1.2 The measures from work relation-ship:

Investing in health systems is crucial in building resilience against (COVID-19) but also offers an opportunity to create decent jobs. Protect employment and incomes for enterprises and workers negatively impacted by the indirect effects (factory closures, disruption to supply chains, travel bans, cancellation of public events, etc.), so it is a must to ensure:

- Social protection through existing schemes and/or ad-hoc payments for workers, including informal, casual, seasonal and migrant workers, and the self-employed (e.g. through access to unemployment benefits, social assistance, and public employment program) (ILO, 2020, p. 6);

- Employment retention schemes, including short-time work arrangements/partial unemployment benefits and other time-bound support for enterprises, such as wage subsidies and temporary cuts to payroll tax/exemptions from social security contributions, provision of paid leave and extension of existing entitlements to workers, and training leave, grants and related schemes (ILO, 2020, pp. 7-8);

- Time-bound financial/tax relief and income smoothing measures to support business continuity, especially MSMEs and the self-employed (e.g. subsidies, credit mediation/refinancing to overcome liquidity constraints) (ILO, 2020, pp. 9-10).

2.2 The protection prescribed in the internal laws and Ministry of Labor, Employment and Social Security measures

Like the International Labor Organization, the Algerian laws on public and general workers and labor relations did not guarantee special protection for each worker individually, or for each work separately. Instead, it decided to comprehensively protect all

workers. The nuclear facilities in Algeria do not rise to their counterparts in the countries of the world, because they are closer to nuclear centers. Perhaps this is what prevented the Algerian government from legislating laws for workers on these nuclear centers.

2.2.1 The measure of protection in internal laws

The damages and disastrous consequences that have become caused by occupational hazards are considered one of the most prominent problems facing the countries of the entire world, regardless of the nature or classification of this country, between an advanced world and another backward one, as long as both seek to use the latest methods and technologies, without thinking about their effects on The worker, because it improves production and increases it, and it is no longer sufficient merely for the legislator to recognize a set of risks and classify them between a work accident or an occupational disease. As the pandemic that the world is witnessing, it is imperative that the countries of the world restore their accounts, and consider their laws to protect workers and labor relations (Fayrouz, 2012, p. 52).

The Algerian legislator has singled out workers for special protection measures. And the aim of the legislator to approve this protection is to take into account the health of the worker (Mezyoud). By creating a system of work medicine, and given that Corona Virus (Covid-19) is a biological hazard, the protection approved by the Algerian legislator is (Executive Decree No. 91/05, 1991):

-The legislator obligated the institution in use to take several measures to face biological hazards, including cleaning the floor of work places and their accessories regularly without stirring dust, this is done by washing and wiping whenever the floor cover allows this, cleaning walls and ceilings, repainting and packaging, as necessary (Executive Decree No. 91/05, 1991).

-Cleaning these places should include measures for disinfection and protection from infectious diseases, regardless of the preventive measures required by the nature of the works (Executive Decree No. 91/05, 1991).

In accordance with the provisions of Article 18 of Executive Decree No. 91, the Algerian legislator obligated to provide workplaces with health facilities, which are not in the same workplaces but close to them, health facilities include rooms for changing clothes equipped with seats and individual tanks, and the establishment of laundries equipped with hot water and providing workers exposed to lack of hygiene, dirt, or the risks of poisoning or rot with pumps near or within the workplaces (Executive Decree No. 91/05, 1991).

For workers exposed to the hazards of ionizing radiation, the protection must be in accordance with what is provided for in the legislation (Decree No. 05-117 of April 11, 2017,, 2017).

Likewise, if workers are exposed to Amiante dust, the rules of protection applied in the workplace must comply with Decree 99-95 (Executive Decree No. 99-95, 1999).

2.2.2 The Ministry of Labor, Employment and Social Security measures

In order to enhance prevention and protection from the risk of an outbreak of the Corona virus (COVID-19), the Ministry of Labor, Employment and Social Security calls on the interests and bodies affiliated with the sector, in addition to the advice and guidance provided by the Ministry of Health, Population and Hospital Reform, to adhere to the following: (the Ministry of Labor, Employment and Social Security , 2020)

- Suspending summoning to the public in general, unless absolutely necessary.
- The suspension of courses and formal training sessions for the bodies that do so (INT, INPRP, OPREBATPH PRESTIMED, ESSS).
- Postponing all demonstrations, sessions, sessions and forums.
- Providing means of cleaning and disinfection in the workplace and making it accessible to workers and users (liquid soap, alcohol disinfectant dispensers).
- Respecting a distance of at least one meter with the comrades, minimizing friction, approaching the comrades and avoiding shaking hands.
- Work to ventilate the workplaces and waiting rooms, in particular.
- Ensure that the work environment is clean with daily dry water.

The Algerian legislator considered the issue of protecting the workplace among the priorities that the employer is obliged to protect. Workers are prevented from diseases and work accidents resulting from a lack of hygiene (Mezyoud).

3. Particular measures to protect nuclear facility workers and their labor relationships from the corona virus (COVID-19)

The nuclear sector has sprung into action to screen employees for signs of the novel corona virus and prepare for potential disruptions to their typical refueling practices in light of pandemic-related travel restrictions. Nuclear generators have been enacting pandemic protocols for weeks to continue protecting their workforce.

Nuclear generators have identified some tasks that can be done remotely or postponed, but some employees must still come to nuclear power plants on a daily basis due to measure of security of the nuclear technology.

3.1 IAEA measures

Health workers are at the front line of the COVID-19 outbreak response and as such are exposed to hazards that put them at risk of infection. They need to reduce the possibility of COVID-19 infections and deal with a loss of staff due to quarantine, in addition to the usual hazards and the added stress of the pandemic.

The IAEA is closely monitoring the COVID-19 global developments and upon request, offers the necessary assistance to Member States to strengthen radiation protection within the framework the IAEA Safety Standards (IAEA), such as international basic safety standards (GSR Part 3) (IAEA, 2014, pp. 118-220), and occupational radiation protection (GSG-7) (IAEA, 2018, p. 77).

All these three Safety Standards set out a holistic approach to risk management in the national radiation safety infrastructure including necessary worker protection. Safety Standards are applicable to normal operations and abnormal conditions in all exposure situations including potential exposures (IAEA).

For health workers, strategies for maintaining droplet precautions and preserving time and cleaning materials, including imaging through barriers (plastic or glass) are required especially where working conditions are impacted due to unavailability of resources and appropriate infrastructure. Additionally, novel working practices are required in medical uses of ionizing radiation in radiological procedures (IAEA, 2018, p. 83).

3.2 measures of nuclear facilities

The nuclear energy industry is facing a shortage of personal protective equipment, like plastic gloves, single-use sanitized wipes, dust masks and disposable thermometers. Several sites must also plan for an influx of 100 or more workers for the cyclical nuclear refueling process scheduled during the spring and fall when demand is lower. As travel is restricted or discouraged and more "non-essential" businesses close down or restrict their hours, utilities are considering the potential limitations of proceeding with refueling outages (Gheorghiu, 2020).

3.2.1 Responses to protect workers and ensure continued operation of reactors

The nuclear industry has taken action in response to the global (COVID-19) pandemic to protect workers and reduce transmission of the virus. Actions that have been taken depend on the guidance and directives implemented in different countries and regions. In countries where it is advised or required, remote working has been implemented for those staff not required to work on-site. This has reduced the number of staff on-site, which helps in implementing social distancing measures (COVID-19 Coronavirus and Nuclear Energy, 2020).

Companies have also restricted or cancelled non-essential business travel and used conference video and audio calls for meetings, even for those employees that were still working on-site. Other ways to enhance social distancing include staggering staff meal breaks to reduce the number of staff using canteens at the same time or staggering the start and end of shifts to reduce the number of staff arriving / leaving at the same time. Measures to screen those workers who are working on-site include temperature monitoring to identify fever, a common symptom of (COVID-19) (COVID-19 Coronavirus and Nuclear Energy, 2020).

In addition, the importance of maintaining high levels of hygiene, staying at home where appropriate and maintaining social distancing away from work will be as high for nuclear workers as it is for everyone. Some companies have secured supplies of food, beds and other essentials to allow workers to stay on-site to minimize their contact with others in the event that this is required. Key nuclear plant staff may also stay in dedicated accommodation and travel to and from site in separate transportation (W.N.N, 2020).

3.2.2 Managing the impacts of COVID-19 on all areas of nuclear industry operations

In many countries operations in different parts of the nuclear industry have continued. However, depending on the situation with COVID-19 where they are located, operations not vital to ensuring the continued operation of nuclear power plants may have been stopped (COVID-19 Coronavirus and Nuclear Energy, 2020).

In some cases working hour arrangements are being modified to account for working conditions during the pandemic. In the US the Nuclear Regulatory Commission had granted exemptions from work-hour controls to seven nuclear power plants (U.S.NRC, 2020).

4. CONCLUSION

This pandemic is unique in many ways, but there are still lessons we can learn from previous economic crises, which highlight the central role of employment, social protection and social dialogue in mitigation and recovery policies.

Workplaces are effective focal points for the dissemination of information, communication and sensitization on occupational safety and health, including prevention and protection measures to reduce the spread of infectious diseases. This, in turn, helps lessen the social and economic impact of such diseases, including by protecting jobs, especially in the most affected sectors. Workers and employers can work together to advocate for prevention, raising awareness and building capacity of their members, and implementing workplace level occupational safety and health practices in line with relevant International Labor Standards.

The International Labor Organization did not specify the type of work or its location, nor the characteristics of the worker, but merely referred in general to protect all workers in the countries of the world from the pandemic (Covid-19).

The International Labor Organization has introduced a set of general standards for all workers around the world to protect against Corona virus, but it has not specified a category of workers exclusively. This puts most bodies in front of the duty to take the necessary measures for each sector.

It is the duty of the International Atomic Energy Agency to take greater care of the safety of workers in nuclear sectors and facilities.

But what we notice in this research is that the International Atomic Energy Agency did not grant enough safety measures to workers in the nuclear sector, and most of the special measures came in separate nuclear facilities.

The International Atomic Energy Agency, in cooperation with the International Labor Organization and workers' organizations, should pay more attention to protecting workers' safety standards and the working relationship in nuclear facilities because of the specificity of the nuclear sector

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