What are Omar's obligation under the given circumstances?

a. If Omar accepts the client's decision and continues to perform his services as an employee of the contractor

If Omar accepts the client's decision and continues to perform his services as an employee of the contractor, then his obligation as an engineer is to acknowledge and recognize his responsibility in prioritizing the health, safety, and wellness of the public. According to the IEEE Principle 1, it is said that "To hold paramount the safety, health, and welfare of the public, to strive to comply with ethical design and sustainable development practices, and to disclose promptly factors that might endanger the public or the environment.", meaning that engineers hold the responsibility of making sure the projects they are developing are compliant in safety standards and protocols, and adhere to the Code of Ethics. Since Omar accepts to continue his services despite safety concerns, he must still observe and document his recommendations and concerns of that matter, which is the absence of EMF protection in the project, to show his reasonable efforts in demonstrating his transparency and maintaining the integrity of his work. Because of cases he found about the links between childhood leukemia and EMF exposure, his action of reporting his concern and documenting the risks associated with EMF despite no widely accepted health and safety standards for this, shows his genuine concern for public health and safety, and displays his truthfulness as an engineer. Even if this decision does not pose a threat to safety, by showing transparency through carefully documenting these concerns, he can continue this work while still following the Code of Ethics. But with the continuous advancement of technology, Omar should diligently research and understand more about technology in its potential and risks in order to allow him to realize the issues and inform the clients of his concerns, which in this case is EMF exposure.

b. If Omar continues to have concerns regarding this matter and declines further work on the project

If Omar continues to have concerns regarding this matter and declines further work on the project, then his obligation as an engineer is justified to decline further work if he finds out that this decision given by his client may be detrimental to the health, safety, and wellness of the public. According to the NSPE Code of Ethics Section II.1.a, it stresses that "If engineers' judgment is overruled under circumstances that endanger life or property, they shall notify their employer or client and such other authority as may be appropriate.", meaning that engineers are required to take action by calling for appropriate authorities and disclosing them the issue when their professional recommendations and judgment are rejected or ignored, a decision which could pose serious consequences, such as damage to property and threat to public health and safety. By declining further work based on his concerns and judgment because of the health risks associated with low frequency EMF exposure he researched, such as childhood leukemia and symptoms of cancer, he displays his priority of public health and safety and ethical standards in his works above all else, adhering to the IEEE Principle 5. After all, his responsibility as an engineer is to improve the welfare, health, and safety of the public through the use of his knowledge, experience, and skills in his works and his judgments in accordance

with the ethical standards of the IEEE and NSPE. With his decision to decline and keep his moral stand, he fulfills the role of a responsible engineer with ethical transparency, accountability, and professionalism.

References:

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