

Comment of the State Commission of Ukraine on Mineral Resources on the Draft UNFC Supplemental Specifications for Groundwater Resources

Foreword

More than 1,500 groundwater deposits (sites) have been explored in Ukraine, about half of which are being developed based on issued licenses.

In Ukraine, groundwater is a mineral of national significance. Similar to reserves and resources of other minerals, operational groundwater reserves are explored, assessed, approved and accounted for by the State Balance of Mineral Reserves of Ukraine.

The State Commission of Ukraine on Mineral Resources (hereinafter – the SCMR) inspects the geological and economic assessment materials (hereinafter – GEA) on reserves and resources of all types of minerals (including groundwater), conducts scientific and research activities on the regulatory and legal framework formation and development, which determines the methodological and legal basis for the geological and economic assessment of mineral reserves and resources.

The basis for groundwater GEA in Ukraine is the Classification of Mineral Reserves and Resources of the State Subsoil Fund (hereinafter – the Classification), which is unified and uniform for all types of minerals. It covers primary features, peculiarities and characteristics of groundwater at various stages of its study, allows differentiating groundwater deposits based on the degree of geological and economic study and investment attractiveness, facilitates and simplifies the solution of investment issues at all stages of groundwater deposit studies.

The Classification of Mineral Reserves and Resources of the State Subsoil Fund is harmonized with the UN Framework Classification (hereinafter – the UNFC) and implements its system of reserve codification by using a three-digit code.

The SCMR has developed corresponding instructions (methodological guidelines) on the application of the Classification to various types of groundwater deposits (drinking, technical, mineral, thermal energy, industrial), which establish geological exploration categories for reserves and the degree of confidence of groundwater resources, determine their features (requirements for degrees of study/knowledge). Separate instructions regulate the requirements for the content, form and submission procedure of GEA materials on groundwater deposits to the SCMR.

Given the abovementioned information, we strongly disagree with the IGRAC's statement regarding the inappropriateness of casting groundwater in this framework and recommendations to remove these resources from the UNFC. Additionally, we believe that the document of the UNFC Supplemental Specifications for Groundwater Resources fully considers the peculiarities of groundwater as a resource, including its connection to the water cycle and other ecosystems through the introduction of the concept of capture, as well as the human right to have access to groundwater due to the introduction of the subcategory of Socially Necessary Groundwater Projects. Regarding the IGRAC's remark that "addressing groundwater sustainability at the project level goes against the efforts to develop holistic, aquifer-based management strategies (that subsequently translate into regulations guiding the development of individual groundwater projects)", we believe that the UNFC Supplemental Specifications for Groundwater Resources do not contradict this, and once the abovementioned management strategies are published, they can be considered during the update of the Supplemental Specifications document, or they can exist simultaneously, and operators or subsoil users will have the opportunity to choose a more convenient and appropriate framework. Currently, there are no such regulations and strategies, so it is not appropriate to deprive an operator or a subsoil user of the opportunity to use the UNFC Supplemental Specifications.

The development and further implementation of the Draft UNFC Supplemental Specifications for Groundwater Resources is a crucial step for the UNFC application to groundwater and the differentiation of groundwater projects based on the UNFC principles.

Comment (Suggestions)

In general, the term “well” should be replaced with a “water intake facility/structure”, since there are other types of structures for the intake of groundwater, for example, a mineshaft.

We also believe that it is necessary to remove from the text of the Supplemental Specifications document the information that it is not recommended to use the degree of confidence G1 in groundwater projects, since, in Ukraine, there are many examples of successful use of this category in the assessment of groundwater reserves. After all, the degree of confidence (G axis) aims to determine all uncertainties related to the material composition, quantitative and qualitative characteristics, technological properties of minerals, geological structure, hydrogeological, mining and geological and other conditions of their deposits to substantiate project decisions on the recovery method and system. According to the degree of geological knowledge and confidence, the G1 category includes explored (proved) groundwater reserves, i.e. volumes in-situ, quantity, quality, technological properties, mining and geological, hydrogeological and other conditions of which have been studied with a high degree of confidence and completeness. In Ukraine, this category of groundwater reserves includes volumes of active projects based on multi-year production data, which makes it possible to clearly distinguish the volume of reserves, the long-term production of which has not led to the deterioration of groundwater quality indicators, production rates and depletion of groundwater sources, unlike the category G2 which does not provide such certainty regarding the volume of reserves.

As for the Groundwater Project Classes section, we propose to add E.A.1/E.B.1– F2–G1+G2 projects to the class of Viable/Potentially Viable Groundwater Projects, as there are projects, particularly in Ukraine, that demonstrate that they will meet all social, environmental and economic conditions for operation, or there are reasonable expectations that they will be able to meet all these conditions within a reasonable timeframe, and there is data confirming that technical recovery of groundwater is feasible, but additional evaluation under site-specific conditions may be warranted to get approval for project development and regulatory approvals.