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## **TRANSLATION OF ENGLISH MULTI-COMPONENT TERMS IN HYDROPOWER ENGINEERING INTO UKRAINIAN**

The predominance of terminological word combinations (multi-component terms) in modern terminology is explained by the need to name complex, composite concepts, refine professional objects and ideas as they are studied, and discover new aspects of the phenomena under study [2, p. 102]. The abundance of multi-component terms in hydropower engineering is due to the interdisciplinary nature of this field, which combines mechanics, hydraulics, physics, and energy engineering. Multi-component terms help avoid ambiguity by precisely defining the concept. Analysis of hydropower terminology reveals that multi-component terms prevail. According to Y. Hrybinyk, in multi-component terms, isolated components may not be terms themselves, but together they form a terminological word combination [1, p. 114]. Examples of multi-component terms include: *headwater level fluctuation* – *коливання рівня верхнього б'єфа*; *water flow velocity distribution* – *розподіл швидкостей потоку води*.

The influence of structural features on translation is especially evident in multi-component terms, which are typically formed without the use of prepositions. The following structural models are typical for English hydropower terms:

- noun + noun + noun: *water intake tower* – *водоприймальна башта*;  
*turbine blade angle* – *кут нахилу лопаті турбіни*; *dam foundation treatment* – *зміцнення основи греблі*;

- adjective + noun + noun: *hydraulic control valve* – *гідравлічний регулювальний клапан*; *automatic regulation system* – *система автоматичного регулювання*;

- adverb + participle II + noun: *vertically installed turbine* – *турбіна, встановлена вертикально*; *horizontally arranged shaft* – *вал, розташований горизонтально*.

According to O. Syrotin, English multi-component terms are characterized by left-branching structures, where dependent components precede the head noun. In contrast, Ukrainian equivalents display right-branching patterns. Therefore, when translating, the head noun is rendered first, followed by its modifiers [3, p. 102]. Typically, the keyword appears at the end of the English term, so translation proceeds from right to left, adding necessary semantic elements (e.g., *automatic voltage regulation system* – *система автоматичного регулювання напруги*; *water discharge rate control* – *регулювання швидкості витрати води*, *river flow regulation system* – *система регулювання річкового стоку*). It is worth noting that the most frequent headwords in multi-component terms are: hydropower, turbine, dam, reservoir, efficiency, water, etc.

Some terms require transformations such as omission or addition: *dam seepage control method* – *метод контролю фільтрації крізь тіло греблі* (addition), *pumped storage power plant* – *гідроакумуляльна електростанція*, *baseload power plant efficiency* – *ефективність базової електростанції* (omission).

Prepositional additions are also frequent in Ukrainian translations: *sediment transport model* – *модель перенесення наносів у руслі*; *penstock flow control device* – *пристрій керування потоком у напірному водоводі*.

Calquing is another productive translation strategy: *automatic emergency shutdown* – *автоматичне аварійне вимкнення*, *reinforced gabion dam* – *армована габіонна дамба*. The technique of specification (narrowing of meaning) is rare but sometimes applied: *turbine installation site* – *турбінна камера* (instead of a literal «place of installation» a more precise term used in hydropower construction, «камера», is used).

Thus, due to the complex and interdisciplinary nature of hydropower engineering, translating multi-component English terms into Ukrainian often requires various lexical and grammatical transformations. The main translation strategies identified include calquing, omission or addition, and specification, which ensure the accuracy and clarity of hydropower terminology in Ukrainian.

## References

1. Hrybinyk Y., Halai T. M. Word-Formation and Structural Features of Terminological Units in the English Geodetic Terminological System. *Вчені записки ТНУ ім. В. І. Вернадського*. Сер.: Філологія.

Журналістика. 2024. Т. 35 (74), № 5. С. 112–116. DOI : 10.32782/2710-4656/2024.5.1/18.

2. Kharchuk L. Terminological Word Combinations in Ukrainian Power Engineering Terminology. *Herald of L'viv Polytechnic National University «Problems of Ukrainian Terminology»*. 2013. № 765. P. 73–77. URL : <https://science.lpnu.ua/terminology/all-volumes-and-issues/herald-no-765-2013/terminological-word-combinations-ukrainian>.

3. Syrotin O. Structural Peculiarities of English Multicomponent Terms of the Biotechnology Sphere. *International Journal of Philology*. 2020. № 24 (2). P. 100-104. URL : <https://doi.org/10.31548/philolog2020.02.100>.