spanning the length of the restaurant wall. A large vertical window also punctures a wall in the champagne bar, extending down to the restaurant to give visitors a view of the sea level, while letting through daylight.

The restaurant has three levels including a foyer and cloakroom, champagne bar, and main restaurant on the lower floor. They are joined by a giant oak staircase. The restaurant seats 35-40 dinner guests every night, in a dining.

Through its architecture it is also intended to inform the public about the biodiversity of the sea. Cameras and other measurement tools have been installed outside the restaurant. Without doubts, it will also serve as a lab for marine biologists to study fish behaviour to help researchers learn about the population, behavior, and diversity of the species living in this part of the North Atlantic.

We believe that in future underwater architecture will develop as a particular branch/industry that will allow take its opportunities to a new level in the sphere of the residential construction, where there is lack of territories.

ANALYSIS OF EXISTING RESPONSIBILITY DISTRIBUTION METHODS FOR THE SPREADING OF THE STRENGTH SYMMETRY IN THE GENERAL CONNECTION POSITION

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As it is known, the consumption and transmission of electric energy of reduced quality causes additional power losses, heating the equipment, its damage, improper operatio and technological process disorder. As a result, it leads to additional financial losses for both suppliers and consumers of electricity. Among all voltage distortions one of the most negative influences is characterized by voltage asymmetry. Its assessment is based on two indicators of the quality of electric energy. These are the factors of voltage asymmetry in reverse and zero sequences:

$$K_{2U} = \frac{U_2}{U_1} \cdot 100\%; \quad (1)$$

$$K_{0U} = \frac{U_2}{U_1} \cdot 100\%, \quad (2)$$

where U_2 - reciprocating voltage module; U_0 - zero voltage sequence module; U_1 - reverse sequence voltage module.

One of the main issues concerning the quality of electric energy is the task of distributing responsibility for distortion of voltage symmetry and, accordingly, for financial losses at the point of general accession .

The traditional approach to solving the problem of responsibility distribution for reducing the quality of electricity involves receiving a response in the form of an amount.Each of the terms can be taken as a factor of proportionality, which characterizes the contribution of one or another accession to the creation of electricity asymmetric quality.

it can be expressed as the following:

$$\underline{U}_{cnom} = \underline{U}_{cnom}^{cucm} + \underline{U}_{cnom}^{C}, \quad (3)$$

where $\underline{U}_{cnom}^{cucm}$and $\underline{U}_{cnom}^{C}$ - contributions to the distortion of voltage in the point of general accession of the electricity system and the electricity consumer accordingly.

$$d_{cnom}^{cucm} + d_{cnom}^{C} = 1, \quad (4)$$

where d_{cnom}^{cucm} and d_{cnom}^{C} are the real factors characterizing the partial contributions of each accession to the voltage distortion in the point of general accession.

The analysis of existing methods, which includes the method of switching on / off the consumer, the method of background asymmetry, the method for symmetric components of equivalent conductivity and the method in the direction of distorted capacities showed that they give different results for the same task, and the identification of symmetric accession is incorrect.

Therefore, the problem of the distribution of responsibility for distortion of voltage symmetry at the point of general accession can not be considered as solved and requires further research.

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MODERN STATE STANDARDS FOR PHOTOVOLTAIC DEVICES IN UKRAINE

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Abstract. Nowadays energy problems are very urgent globally. For Ukraine, the issue is very important, as our country is currently passing a period of reforming. As the result, electricity prices rise, people start to look for ways to get better economic conditions. At this time in Ukraine large quantities of solar systems are delivered from China, Korea and other countries, but the issues of maintenance and calibration have not been sufficiently developed. The article is dedicated to the metrology of solar energy, in particular, to the research standards used for solar power engineering in Ukraine.