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C O N T E N T S

CENTRAL DEVICE OF UNDER FREQUENCY LOAD SHEDDING.

O.Burduashvili, M.Rukhvadze. **"Energy". №4(92). 2019. Tbilisi. p. 5-8. geo. sum geo. engl. rus.**

Since Georgian electrical system is quite small, 50-100 MW disturbances causes frequency deviation. Georgian transmission network generally operates with Russia. The imbalance in Georgian system will probably caused by outage of tie line. Usually imbalance is eliminated by RAS (Remedial Action System) systemthat is interconnected with SCADA system. In this article it is described the original central load shedding device.

Tabl. 1, bibl. 3.

TOPOGRAPHICAL-GEODETIC SURVEY FOR SPATIAL ANALYSIS OF MOUNTAIN-SKI RESORTS BASED ON GEOINFORMATION SYSTEMS.

E.Khokhiashvili. **"Energy". №4(92). 2019. Tbilisi. p. 9-15. geo. sum geo. engl. rus.**

The article discusses how to develop general theory and mathematical algorithm using topographic-geodetic surveys and modern geoinformation system (GIS) technologies for territorial research and spatial analysis of high mountain regions.All this will be the basis for identifying potential areas of mountain ski resorts and planning and development of relevant tourism infrastructure.

Bibl. 6.

NATURAL RENEWAL OF GEORGIAN OAK (Q.IBERICA STEV.) IN THE KAKHETI COOL ECOTOPE (HUMIDUM) BLACKBERRY (QUERCETUM RUBOZUM) OAK FORESTS.

M.Samadashvili. **"Energy". №4(92). 2019. Tbilisi. p. 16-19. geo. sum geo. engl. rus.**

This paper presents the results of a study of the natural renewal of these and other timber species in the mixed oak forest in the mixed groves of Georgian oak near Kakheti, Pankisi Gorge, near the villages of Dzibakhevi and Duisi. The analysis of the results revealed that in both sample areas, natural upgrades in both low and medium grade grove congestion are highly unsatisfactory, and this is also unsatisfactory for both oak and other timber. The main reasons for this are: the recent exploitation of timber for timber extraction, unregulated grazing of cattle and more.

Tabl. 1, bibl. 2.

LAND CADASTRE AS A TOOL FOR LAND MANAGEMENT (FOR EXAMPLE MTSKHETA DISTRICT).

L.Darchiashvili, F.Qvatsabaia. **"Energy". №4(92). 2019. Tbilisi. p. 20-23. geo. sum geo. engl. rus.**

The article analyzes the contents of the cadastere, as one of the tools for the efficient and rational use management of land resources. The cadaster is regarder as an information system on the natural, economic, ecological and economictionsatatus of land resources and has a role in managing land resources; The nature of land cadastral systems and their relevance in the context of a market economy and hence in new land relations is shown.

Bibl. 3.

DISADVANTAGES OF DEPARTMENT OF THE LAND CADASTRAL ON THE EXAMPLE OF MTSKHETA DISTRICT.

***L. Darchiashvili*.** **"Energy". №4(92). 2019. Tbilisi. p. 24-26. geo. sum geo. engl. rus.**

The content of the inventory is analyzed as one of the effective tools for rational use and management of land management. The cadastre is presented as an information system on the natural, economic and environmental status of land resources. The results of the studies will determine the possibility of reducing unregistered land in the Mtskheta region, which confirms their relevance in a market economy.

Bibl.3.

FOREST RESOURCES MANAGEMENT USING MODERN GEOINFORMATION TECHNOLOGY.

Khokhiashvili E. **"Energy". №4(92). 2019. Tbilisi. p. 27-32. geo. sum geo. engl. rus.**

The main goal of this article is to identify the big potential of geoinformation technology in forest management. Geoinformation system is an instrument which helps in determining, collecting, maintaining, maintaining and managing all existing data related to forests, finding and solving problems, analyzing the situation and planning of future actions, and visualizing all the above.

Bibl. 6.

MINE ORIENTATION BY THREE PLUMMETS THROUGH THE VERTICAL SHAFT.

S. Piralishvili, M. Nadiradze. **"Energy". №4(92). 2019. Tbilisi. p. 33-39. geo. sum geo. engl. rus.**

In the works, a new mine orientation methom is argued for the task of mine surveying that is one of the servicing engineering specialty in Mining Industry. This is orienting of shaft by three plummets through one vertical mineshaft. Main goal of study is to show weak point of the orientation method that is known up to day and potential ability to mitigate the impacting negative factors on the method performance. Furthermore, additional control over measurements is provided by this method that increases the accuracy of orientation. The results show that the mean square error of directions determination of the basic lines does not exceed 8", which is more accurate than in the case of orientation method by two plummets.

Ill. 3, tabl. 2, bibl. 4.