

*

Tehniko-ekonomiczne porównanie wariantów umieszczenia wiatrowni ta teoretyczne uzasadnienie ekologiczno ci umieszczenia wiatrowni na hałdach

560,8
3,754

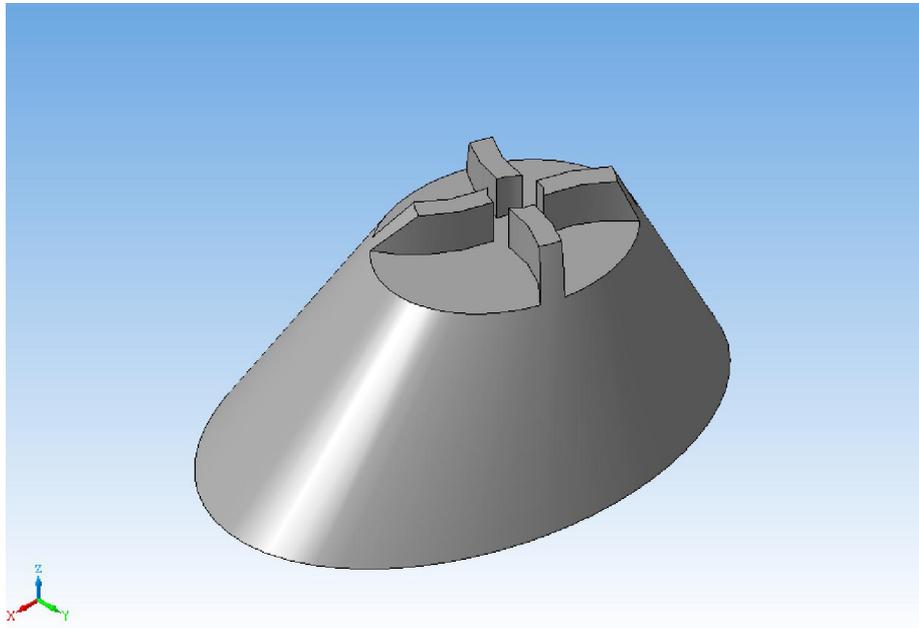
[5].

600,

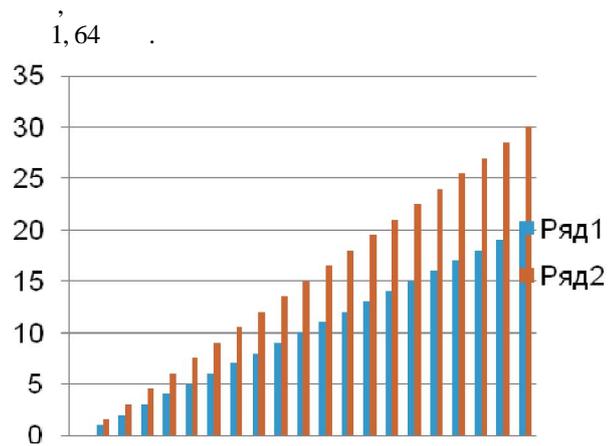
[6]

*

, e-mail: dasham@ukr.net

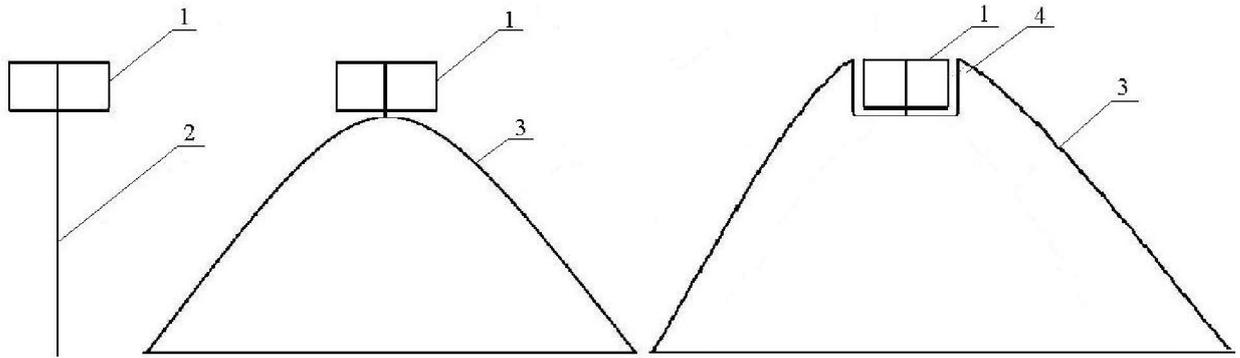


.1
Figure 1 Model waste dump with concentrators flow - artificial reliefs.



.2 -
1 -
2 -

Figure 2 - Diagram of the wind speed increases the flow
Row 1 - typical of the steppe regions of Ukraine the wind speed at waste dumps,
Row 2 - increased speed of the wind flow in the artificial topography.



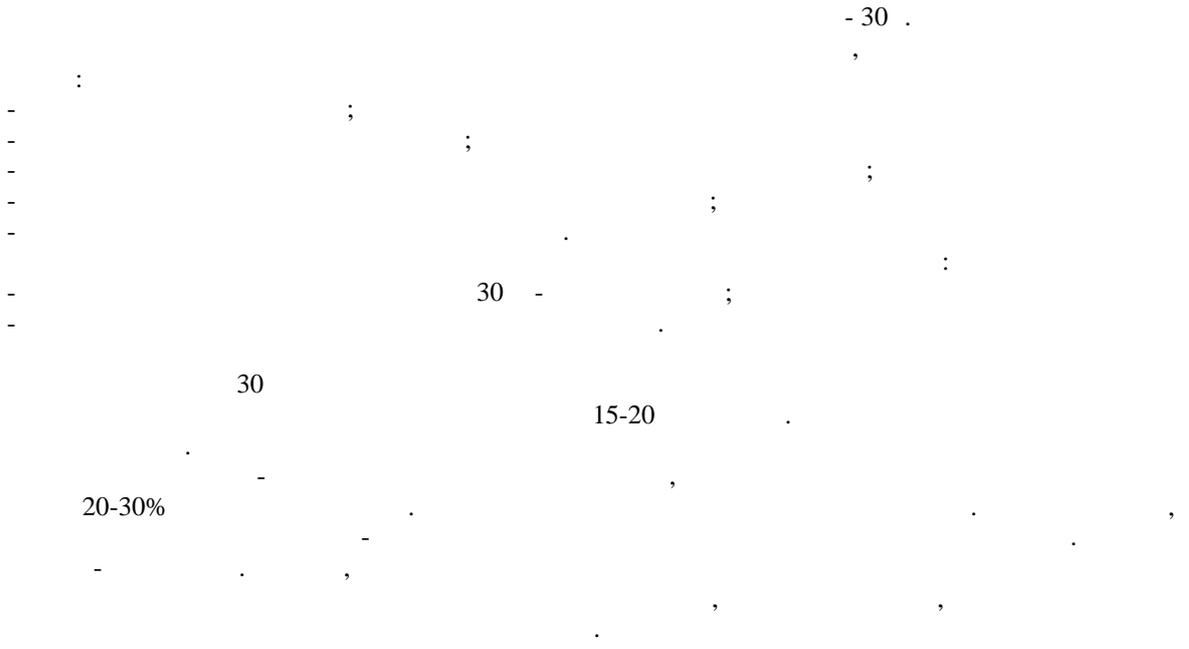
- . 3.
- 1 - ;
 - 2 - ;
 - 3 - ;
 - 4 -

Figure 3. Arrangements of the turbine.

- 1 - wind generator;
- 2 - metal mast;
- 3 - waste dump;
- 4 - artificial reliefs.

Option A - standard location on the metal turbine mast.

Option B - the wind turbine placement in the waste dump. Option C - placing wind turbines in an artificial topography - the hub of the wind flow at the waste dump.



55

68640

12 \ 208416

167 34049

10%

167

34049

- 1.
- 2.
- 3.
- 4.
- 5.

10-100

100

Ta . 1.

Table 1. Maximum allowable level of noise, dB

	70
	70
	75
	85
	60
	50

45

50-100

10

20

100

180 /

1. 79329 UA, 7 F 23 G5/027. / . . . , . . . (); , . 15.11.2005. 11. 2020 (
2.)/ . - 2001. - 2.
3. 290 22.05.2006 « »
4. . . . -2004.-238 . , - .
5. , 27.02.2010
6. 290 22.05.2006 « »

DARIA MAKEJEVA

Techno-economic comparison of options for installing wind turbines and theoretical basis for ecological windturbines on waste dumps
hałda , koncentrator nurtów wiatru, sztuczne reliefy

Keywords:

waste dump-hubs flow-artificial reliefs

Abstract:

Actually problem for today is development a new technologies relating to environmentally safe and economically efficient using of dumps and the use of alternative energy sources. One a way of this is the location on dumps of autonomous wind power generators. This comprehensive approach will have simultaneously a decision of several technical and technological problems and solve the problems of increasing environmental safety.