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LLC DTEK Grids


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The White Stork Nests Instalation Report of LLC DTEK Grids, 2021-2023

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1.Introduction

The protection of the white stork in Ukraine is enshrined in legislation. It is protected by the law of Ukraine “About fauna,” as well as by Bonn, Bern and Ramsar conventions, ratified by our country in 1996. However, an everyday life of white stork is a series of dangers that the birds constantly face.

The main threats for the stork can be split into two groups. First one is of a natural origin, the other – anthropic.

The first one includes atmospheric phenomena: droughts, continuous rains, unexpected frost; falling of the nest due to the wind; lightning hitting the nest; predator attacks. These dangers have always existed, they are part of natural selection and they do not affect the population significantly.

The main dangers that may even lead to extinction of the species, if they are not stopped, belong to the second group and are caused by human activity. This is primarily: **lack of locations suitable for building a nest**, loss of feeding sites, unfavorable changes in the environment at the wintering sites and on the migration paths.

2. Materials, methods and discussion

1980s saw mass transition of the white stork nesting from traditional (on trees, household outbuildings) to nontraditional (most frequently – on power line poles); currently the share of nests on the poles in Ukraine is 50% and rising constantly every year. Such way of nest arrangement is convenient for the bird (high enough, free approach, good overview of the area). Nesting on the power grid poles practically solved white stork’s problem related to lack of places for nest arrangement. Although it created two other significant problems; first one is the death of birds, especially hatchlings, on the electrical wires; the second one is emergencies on the grids due to short-circuit of wiring by birds or their nests.

Today, we know three main ways to protect the white stork and its nests, located on the power lines poles; the first one is replacement of the overhead lines with the underground ones, the second one is relocation of nests to the unused pylons, installed near the active power line poles; both options are efficient but too expensive. The third option is a compromise between environmental and economic interests – placing/relocating stork nests to the artificial platforms that lift the nest about a meter above the wires.

The DTEK Grids company implements a number of projects related to the ornithological safety at its sites. This includes installation of special reflective markers directly on the wires at the potentially dangerous sections of lines, installation of bird protective devices of the anti-sitting type and protective casings, which are examples

of implementing world best practices in this field. The works are conducted with regard to targeted monitoring of the impact of power lines on birdlife at the potentially dangerous sections of lines, inspecting, registering and managing the register of white stork nests, located at the power facilities of the Company in all regions of its presence, initiating and arranging various educational events.

Fabrication of special platforms for white stork nests is carried out with consideration of circular economy principles – from secondary materials.

The methodology of its fabrication and installation is replication of the best practices of the European Union, Polish power companies and ornithologists, in particular.

This project is aimed at both preservation of bird nests and ensuring uninterrupted operation of the grids, thus minimizing conflict of interest between the environment and energy workers. [1, 2]

In order to achieve set goals, ecologists of DTEK Dnipro Grids, DTEK Kyiv Grids, DTEK Kyiv Regional Grids and DTEK Odesa Grids of the DTEK Grids Holding, with involvement of operational personnel, constantly conduct collection and analysis of data related to presence, condition and population of the stork nests. Lately, Company's customers and active public joined the process of informing about such ornithology sites.

The works (installation sequence, providing and arranging allocation of the required resources – materials, special machinery and personnel for fabrication and installation of special platforms) are planned based on the analysis of collected data.

3. Results of the project on installation of platforms for the white stork nests

During 2021-2023, DTEK Grids Distribution System Operators have relocated (installed on special platforms) 294 stork nests in Kyiv, Odesa and Dnipropetrovsk regions, and in the city of Kyiv.

Energy workers install them to protect birds and prevent power outage for the customers, as the collapse of nests on electric wires frequently cause emergencies.

All works related to installation of artificial platforms are performed outside the nesting period, from October to March and only by qualified energy personnel.

Already tested constructive solutions that proved themselves well in operation are fabricated, as the stork nest becomes several tens of kilograms heavier each year.

Further implementation of the project on installation of platforms for the white stork nests will allow to significantly reduce economic losses and death rate among the birds.

4. Conclusions

Despite the war, DTEK Grids company continues to not only restore and reinforce the energy infrastructure but also develop and repair the grids based on the sustainable development principles, taking care of protecting biodiversity and environment.

Energy workers carry out reinforcement of the stork nests as an important component of a large-scale program on ensuring ornithology security of energy equipment within the project #EnergyWings, aimed at protection and preservation of the white stork population in Ukraine. It complies with ESG principles and Sustainable Development Goals of the UN Global Compact.

The idea of nests relocation to the special platforms first appeared in Poland, where today almost all stork nests on the poles are lifted to the artificial platforms, thanks to the fruitful cooperation of environmental organizations and energy services.

Therefore, the project is an example of international collaboration and implementation of the best European practices.

List of references

1. Bokotei A.A., Kaluha I., Abramchuk A. Protection of the white stork in Poland, Ukraine and Bilorus. – Lviv-Siedlce-Brest. 2010. – 16 p.
2. Bokotei A.A., Dziubenko N., Perchuk V. Storks, people and energy industry: solving the problem. – Lviv – 2011. – 32 p.

Annex 1 List of sites of nest relocation to the platforms

Item	DSO	Unit	District	Settlement	Number of installed platforms
1	DTEK Kyiv Grids	Distribution power lines operation unit	-	Kyiv	6
2	DTEK Dnipro Grids	Verkhnodniprovsk station of the Western region of the power grids	Kamianske	Pushkarivka	1
3		Sofiivka station of the Western region of the power grids	Kryvyi Rih	Sofiivka	2
4		Mahdalynivka station of the Central region of the power grids	Novomoskovsk	Dmukhailivka	3
5		Mahdalynivka station of the Central region of the power grids	Novomoskovsk	Lychkove	1
6		Tsarychanka station of the Central region of the power grids	Dnipro	Ivanivka	2
7		Tsarychanka station of the Central region of the power grids	Dnipro	Katerynivka	2
8		Pidgorodne station of the Dnipro region of the power grids	Dnipro	Obukhivka	1
9		Synelnikove station of the Eastern region of the power grids	Synelnikove	Pysarivka	2
10		Novomoskovsk station of the Central region of the power grids	Novomoskovsk	Novomoskovsk	1
11		Novomoskovsk station of the Central region of the power grids	Novomoskovsk	Pereshchepyno	2
12		Krynychky station of the Western region of the power grids	Kamianske	Stepanivka	1
13		Krynychky station of the Western region of the power grids	Kamianske	Katerynopol	1
14		Petropavlivka station of the Eastern region of the power grids	Synelnikove	Troitske	1
15		Krynychky station of the Western region of the power grids	Kamianske	Novomyloradivka	1
16		Krynychky station of the Western region of the power grids	Kamianske	Olenivka	1
17		Tsarychanka station of the Central region of the power grids	Dnipro	Khutorske	1
18		Tsarychanka station of the Central region of the power grids	Dnipro	Mykolaivka	2
19		Tsarychanka station of the Central region of the power grids	Dnipro	Sotnytske	1
20		Tsarychanka station of the Central region of the power grids	Dnipro	Tsarychanka	1
21		Nikopol station of the Southern region of the power grids	Nikopol	Tavriiske	2
22		Pavlohrad station of the Eastern region of the power grids	Pavlohrad	Levadky	4
23		Pavlohrad station of the Eastern region of the power grids	Pavlohrad	Morozovske	1
24		Pavlohrad station of the Eastern region of the power grids	Pavlohrad	Pavlohrad	1
25		Krynychky station of the Western region of the power grids	Kamianske	Illinka	1
26		Krynychky station of the Western region of the power grids	Kamianske	Stepanivka	1

27		Kryvyi Rih station of the Western region of the power grids	Kryvyi Rih	Vodiane	1	
28		Kryvyi Rih station of the Western region of the power grids	Kryvyi Rih	Zlatoustivka	1	
29		Shyroke station of the Western region of the power grids	Kryvyi Rih	Rozivka	1	
30		Novomoskovsk station of the Central region of the power grids	Novomoskovsk	Novomoskovsk	1	
31		Novomoskovsk station of the Central region of the power grids	Novomoskovsk	Pischanka	1	
32	DTEK Kyiv Regional Grids	Northern region of the power grids	Bucha district	Mykhailivka-Rubezhivka	5	
33		Northern region of the power grids	Makariv district	Andriivka	1	
34		Northern region of the power grids	Bucha district	Zabuchcha	1	
35		Northern region of the power grids	Bucha district	Hnatovka	1	
36		Northern region of the power grids	Bucha district	Myrotske	2	
37		Northern region of the power grids	Bucha district	Horenka	1	
38		Northern region of the power grids	Bucha district	Khmilna	1	
39		Northern region of the power grids	Bucha district	Demydiv	3	
40		Northern region of the power grids	Bucha district	Luka	1	
41		Northern region of the power grids	Bucha district	Bilohorodka	2	
42		Northern region of the power grids	Bucha district	Hnatovka	1	
43		Northern region of the power grids	Bucha district	Muzychi	1	
44		Northern region of the power grids	Bucha district	Dymer	2	
45		Eastern region of the power grids	Boryspil	Boryspil	2	
46		Eastern region of the power grids	Brovary district	Berezan	1	
47		Eastern region of the power grids	Boryspil	Velyka Starytsia	1	
48		Eastern region of the power grids	Boryspil	Vyshenki	1	
49		Eastern region of the power grids	Brovary district	Rozhny	1	
50		Eastern region of the power grids	Boryspil	Hnidyn	2	
51		Western region of the power grids	Kaharlytskyi district	Horokhove	2	
52		Western region of the power grids	Obukhiv district	Pidhirtsi	3	
53		Western region of the power grids	Rokytno district	Syniava	1	
54		Western region of the power grids	Rokytno district	Rokytno	1	
55		Western region of the power grids	Fastiv district	Velyka Ofirna	1	
56		Southern region of the power grids	Tarashcha district	Kalynove	2	
57		Southern region of the power grids	Bila Tserkva	Stavyshe	1	
58		Southern region of the power grids	Bohuslav district	Zakutyntsi	2	
59		Southern region of the power grids	Tetiiv district	Pohreby	1	
60		Southern region of the power grids	Tetiiv district	Rosishky	1	
61		Southern region of the power grids	Bila Tserkva	Drozdy	2	
62		Southern region of the power grids	Skvyra district	Skvyra	3	
63		Southern region of the power grids	Bila Tserkva	Potiivka	3	
64		Southern region of the power grids	Skvyra district	Krasnolisy	3	
65		Northern region of the power grids	Bucha district	Kniazhychi	1	
66		Eastern region of the power grids	Brovary district	Kulazhyntsi	1	
67		Eastern region of the power grids	Boryspil	Voronkiv	2	
68		Fastiv region of the power grids	Makariv district	Kolonshchyna	1	
69		Fastiv region of the power grids	Borodianska district	Shybeno	1	
70		DTEK Odesa Grids	Odesa region of the power grids	Odesa district	Nadlymanske	1
71			Odesa region of the power grids	Odesa district	Biliaivka	1
72	Odesa region of the power grids		Odesa district	Troitske	1	
73	Odesa region of the power grids		Odesa district	Myrne	1	
74	Odesa region of the power grids		Rozdilna district	Balkove	1	
75	Odesa region of the power grids		Rozdilna district	Yeremiivka	1	
76	Odesa region of the power grids		Rozdilna district	Poniativka	1	
77	Odesa region of the power grids		Rozdilna district	Yakovlivka	1	
78	Odesa region of the power grids		Rozdilna district	Koshary	1	
79	Odesa region of the power grids		Berezivka district	Prokhorove	2	
80	Odesa region of the power grids		Berezivka district	Buzynovo	1	

81	Odesa region of the power grids	Berezivka district	Bohunove	2
82	Odesa region of the power grids	Berezivka district	Mykhailopil	13
83	Odesa region of the power grids	Berezivka district	N. Mykolaivka	1
84	Odesa region of the power grids	Berezivka district	Yevhenivka	1
85	Odesa region of the power grids	Berezivka district	Sharove	2
86	Odesa region of the power grids	Berezivka district	Kozlove	1
87	Podilsk region of the power grids	Podilsk district	Archepytivka	2
88	Podilsk region of the power grids	Podilsk district	Vyshneve	1
89	Podilsk region of the power grids	Podilsk district	Bokove	1
90	Podilsk region of the power grids	Podilsk district	Troitske	1
91	Podilsk region of the power grids	Podilsk district	Adamivka	2
92	Podilsk region of the power grids	Podilsk district	Chervonyi Yar	1
93	Podilsk region of the power grids	Podilsk district	Yasenove Pershe	2
94	Podilsk region of the power grids	Podilsk district	Bobryk Pershyi	2
95	Podilsk region of the power grids	Podilsk district	Yasenove Druhe	1
96	Podilsk region of the power grids	Podilsk district	Komarove	2
97	Podilsk region of the power grids	Podilsk district	Hvozdavka Persha	1
98	Podilsk region of the power grids	Podilsk district	Hvozdavka Druha	1
99	Podilsk region of the power grids	Podilsk district	Poznanka Persha	1
100	Podilsk region of the power grids	Podilsk district	Yashynivka	1
101	Podilsk region of the power grids	Podilsk district	Amury	2
103	Podilsk region of the power grids	Podilsk district	Baitaly	1
104	Podilsk region of the power grids	Podilsk district	Kokhanivka	2
105	Podilsk region of the power grids	Podilsk district	Romanivka	1
106	Podilsk region of the power grids	Podilsk district	Mykhailivka	1
107	Podilsk region of the power grids	Podilsk district	Nemyrivske	1
108	Podilsk region of the power grids	Podilsk district	Holma	1
109	Podilsk region of the power grids	Podilsk district	Ploske	2
110	Podilsk region of the power grids	Podilsk district	Novopol	1
111	Podilsk region of the power grids	Podilsk district	Herbino	1
112	Podilsk region of the power grids	Podilsk district	Shliakhove	1
113	Podilsk region of the power grids	Podilsk district	Yevtodiia	2
114	Podilsk region of the power grids	Podilsk district	Pishchana	1
115	Podilsk region of the power grids	Podilsk district	Balta	3
116	Podilsk region of the power grids	Podilsk district	Savran	4
117	Podilsk region of the power grids	Podilsk district	Kapustianka	1
118	Podilsk region of the power grids	Podilsk district	Nedilkove	1
119	Podilsk region of the power grids	Podilsk district	Baibuzivka	1
120	Podilsk region of the power grids	Podilsk district	Baksha	1
121	Podilsk region of the power grids	Podilsk district	Yosypivka	1
122	Podilsk region of the power grids	Podilsk district	Kamiane	2
123	Podilsk region of the power grids	Podilsk district	Osinovka	1
124	Podilsk region of the power grids	Podilsk district	Yarynoslavka	2
125	Podilsk region of the power grids	Podilsk district	Hryhorivka	1
126	Podilsk region of the power grids	Podilsk district	Novopetrivka	1
127	Podilsk region of the power grids	Podilsk district	Armashivka	1
128	Podilsk region of the power grids	Podilsk district	Mykolaivka	2
129	Podilsk region of the power grids	Podilsk district	Viktorivka	2
130	Podilsk region of the power grids	Podilsk district	Revove	2
131	Podilsk region of the power grids	Podilsk district	Morozovo	2
132	Podilsk region of the power grids	Podilsk district	Vasylivka	3
133	Podilsk region of the power grids	Podilsk district	Oleksiivka	1
134	Podilsk region of the power grids	Podilsk district	A-Ivanovo	1
135	Podilsk region of the power grids	Podilsk district	Peremoha	1
136	Podilsk region of the power grids	Podilsk district	Syrotynka	4
137	Podilsk region of the power grids	Podilsk district	Petrivka	1
138	Podilsk region of the power grids	Podilsk district	Skosarivka	1
139	Podilsk region of the power grids	Podilsk district	Bohdanivka	1
140	Podilsk region of the power grids	Podilsk district	Striukovo	3

141	Podilsk region of the power grids	Podilsk district	Levadivka	1
142	Podilsk region of the power grids	Podilsk district	Komarashevo	3
143	Podilsk region of the power grids	Podilsk district	Ulianivka	2
144	Podilsk region of the power grids	Podilsk district	Nastasiivka	1
145	Podilsk region of the power grids	Podilsk district	Kakhovka	1
146	Podilsk region of the power grids	Podilsk district	Soshe Ostrivske	1
147	Podilsk region of the power grids	Podilsk district	V.Mykhailivka	2
148	Podilsk region of the power grids	Podilsk district	Liakhy	1
149	Podilsk region of the power grids	Podilsk district	Malozymenove	3
150	Podilsk region of the power grids	Podilsk district	Tolmachivka	3
151	Podilsk region of the power grids	Podilsk district	Marianivka	1
152	Podilsk region of the power grids	Podilsk district	Balyshevo	2
153	Podilsk region of the power grids	Podilsk district	Mykolaivka	1
154	Podilsk region of the power grids	Podilsk district	St. Kulna	2
155	Podilsk region of the power grids	Podilsk district	Liubomyrka	1
156	Podilsk region of the power grids	Podilsk district	Stanyslavka	1
157	Podilsk region of the power grids	Podilsk district	Hlybochok	1
158	Podilsk region of the power grids	Podilsk district	Lypetske	1
159	Podilsk region of the power grids	Podilsk district	Stavrove	1
160	Podilsk region of the power grids	Podilsk district	Rozivka	1
161	Podilsk region of the power grids	Podilsk district	Fedosiivka	2
162	Podilsk region of the power grids	Podilsk district	Vasylivka	1
163	Podilsk region of the power grids	Podilsk district	Okny	1
164	Podilsk region of the power grids	Podilsk district	Topaly	2
165	Podilsk region of the power grids	Podilsk district	Havynosy	1
166	Podilsk region of the power grids	Podilsk district	Dihory	1
167	Podilsk region of the power grids	Podilsk district	Dubove	1
168	Podilsk region of the power grids	Podilsk district	Kodyma	1
169	Podilsk region of the power grids	Podilsk district	Pyrizhna	2
170	Podilsk region of the power grids	Podilsk district	Ivashkiv	2
171	Podilsk region of the power grids	Podilsk district	Bashtankiv	1
172	Podilsk region of the power grids	Podilsk district	Serhiivka	1
173	Podilsk region of the power grids	Podilsk district	Zahnitkiv	1
174	Podilsk region of the power grids	Podilsk district	Nazarovo	1
175	Podilsk region of the power grids	Podilsk district	Kyrylivka	1
176	Podilsk region of the power grids	Podilsk district	Slobidka	2
177	Podilsk region of the power grids	Podilsk district	Kruti	1
178	Podilsk region of the power grids	Podilsk district	Strymba	1
179	Izmail region of the power grids	Bolhrad district	Artsyz	1
180	Izmail region of the power grids	Bolhrad district	Dolynivka	2
181	Izmail region of the power grids	Bolhrad district	Dmytrivka	1
182	Izmail region of the power grids	Bolhrad district	Vynohradne	1
183	Izmail region of the power grids	Bolhrad district	Yarove	1
184	Izmail region of the power grids	Bolhrad district	Serpneve	2
185	Izmail region of the power grids	Izmail district	Reni	1
186	Izmail region of the power grids	Izmail district	Dolynske	1
187	Izmail region of the power grids	Izmail district	Orlovka	1
188	Izmail region of the power grids	Sarata district	Pshenychne	1
189	Izmail region of the power grids	Sarata district	Petropavlivka	1
190	Izmail region of the power grids	Bilhorod-Dnistrovskiyi	Salhany	5
Overall DTEK Grids:				294