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GREEK LIAISON OFFICE

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ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ ΓΡΑΦΕΙΟ ΣΥΝΔΕΣΜΟΥ ΣΚΟΠΙΑ

KOINO EFEILON

ΓΡΑΦΕΙΟ ΟΙΚΟΝΟΜΙΚΩΝ ΚΑΙ ΕΜΠΟΡΙΚΩΝ ΥΠΟΘΕΣΕΩΝ

> Σκόπια, 18 Απριλίου 2016 Φ.2721/ 4 /ΑΣ 103 А.П.

ΠΡΟΣ : ως πίνακας αποδεκτών

Μέσω ΣΗΔΕ

KOIN.:

ως πίνακας κοινοποιήσεων

Ε.Δ.:

Γραφείο Συνδέσμου

Σκόπια

ΘΕΜΑ: Δημόσια προκήρυξη εκδήλωσης ενδιαφέροντος της Κυβέρνησης της πΓΔΜ για

τον σχεδιασμό, κατασκευή και παραχώρηση υδροηλεκτρικών μονάδων Chebren

και Galishte

ΣXET:

ΑΠΦ 2721/1/ΑΣ58/1.3.2016/έγγραφο μας

Σε συνέχεια σχετικού εγγράφου μας, αποστέλλουμε συνημμένα περαιτέρω πληροφόρηση για τις δύο υδροηλεκτρικές μονάδες που αναφέρονται στη δημόσια προκήρυξη.

Η Πραϊσταμένη

Όλγφ/Μέζερίδου-Φαουοβα

Σὖμβουλος ΟΕΎ Α΄

Σύν, Συνημ.

-Πίνακας

Σελ.:

αποδεκτών

- Πίνακας

κοινοποιήσεων

- 2 GEA. HPP Cebren/Galiste

Σελίδα Ι από 3.

2721/30/AΣ 514

KOINO

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18/04/2016 15:20 HPP Cebron

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ΑΝΑΓΝΩΡΙΖΕΤΑΙ ΑΓΙΟ ΤΗΝ ΕΛΛΑΔΑ Ω RECOGNISED BY GREECE AS FYROM/NITAM

HPP Cebren



This project will be implemented under the competence of Ministry of Environment and Physical Planning.

HPP Cebren is predicted to be constructed on the river Crna Reka, near to village Manastir, 7 km upstream of the Rasimbegov bridge. With its huge accumulation area, this HPP is enabled for regulation of natural flows of river Crna Reka. This accumulation is the first of three energetic scales and is very important because it produce qualitative energy, not only to HPP CEBREN, but also to other downstream HPPs, which have been already constructed or will be constructed (HPP TIKVES and HPP GALISTE).

HPP Cebren is settled in the river bad, close to the gravity arch dam. In the design documentation overflow is predicted to be over the dam, and foundation outlets are in the dam body.

A small dam, the Orlov Kamen, is intended as a bottom basin for HPP CEBREN, reversible units. This reservoir occupies the furthest upstream part of the Galiste reservoir and is separated by a concrete barrier; enables that the Galiste reservoir works independently from the upstream reversible units dam Cebren.

Main characteristics of the HPP Cebren are:	
Average discharge	26,00 m3 /s
Average production	840/786 GWh
Construction height of the dam	192,50 m
Surface height	180 m
Installed flow (turbine/pumps)	231/208 m3/s
Number of units	3
Installed capacity (turbine/pump)	333/347 MW
Gross head (max/min)	172/150 m
Turbine type	Francis reversible
Generator type	Synchrony Three Phase
Investment value	318.489.000 EURO
Construction period	6 years

🕮 HPP CEBREN

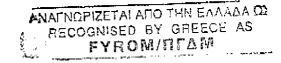
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HPP Galiste

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HPP Galiste



This project will be implemented under the competence of Ministry of Environment and Physical Planning.

HPP Galiste The partition place (future dam) "Galiste", located in the middle part of the gorge (ravine) stretch of the r. Crna Reka, at the very front spot of the existing water storage "Tikves", i.e. 54 km. upstream of the r. Crna Reka emptying into the r. Vardar.It will be a dam site facility. The HPP includes the following structures: rock fill dam with a clay core, grouting curtain, upstream and downstream cofferdam which enters the dam body, a diversion tunnel which will serve as a foundation outlet, a spillway (overflow) organ - shaft overflow, supply organ, power house comprising of three generator sets as well as a 110 kV switchyard located in the area between the dam and the power house.

Design documentation is on the level of primary design.

Main characteristics of the Galiste dam are:	
Average discharge	28,90 m3 /s
Average production	262,50 GWh
Construction height of the dam	141,50 m
Surface height of the dam	138,50 m
Installed flow	1 80,00 m 3/s
Number of units	3
Installed capacity	193,50 MW
Gross head (max/min)	129,20/78,30 m
Turbine type	Francis
Generator type	Synchrony three phase
Investment value	200.241.000 EURO
Construction period	7 years

T HPP GALISTE