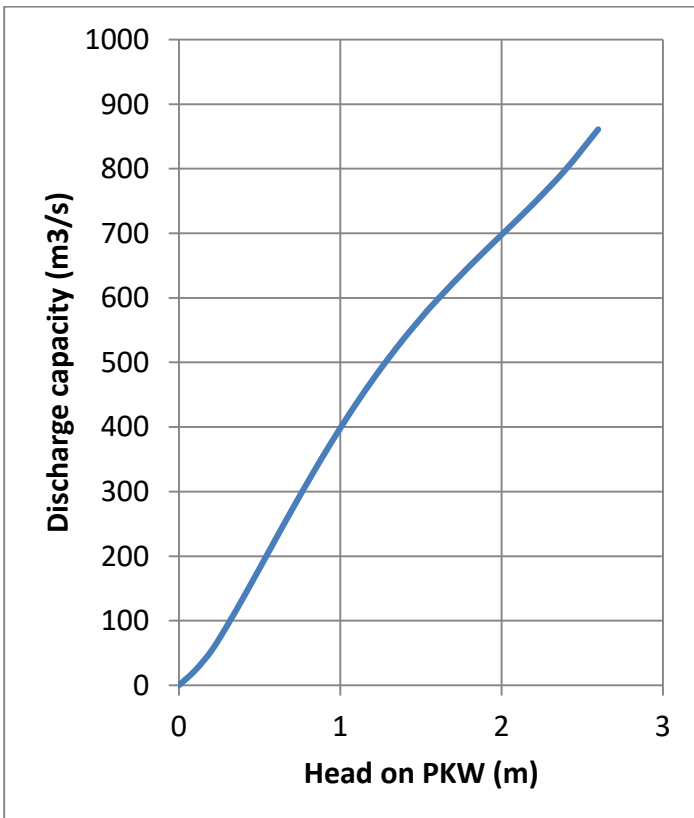




Dam's name:

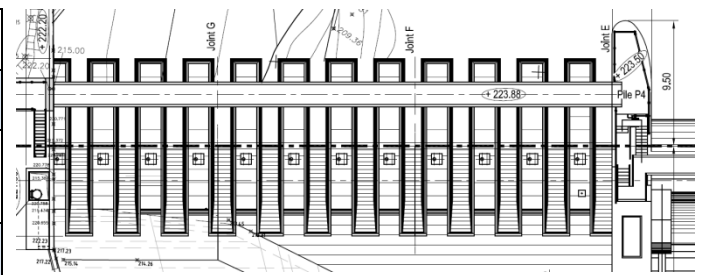
MALARCE

PKW's year of Construction: 2012

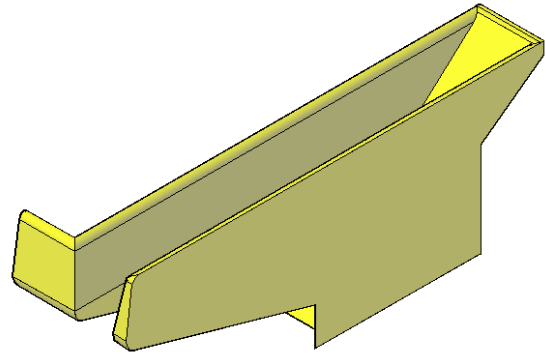


Country: France

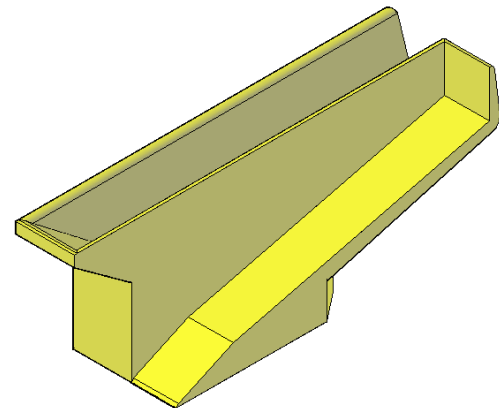
<i>Progress of work :</i>	Built
<i>Dam's owner:</i>	EDF
<i>Consultant and physical model laboratory:</i>	EDF-LNHE
<i>Contractor:</i>	SOGEA, COFEX, CAZAL
<i>PKW location:</i>	On the right side of the dam
<i>Downstream energy dissipation type:</i>	Spillway and deflector bucket
<i>PKW purpose:</i>	Increase discharge capacity
<i>PKW discharge capacity at MWL (m³/s):</i>	568
<i>Surveillance devices (Presence and type):</i>	Yes, structure vibration, aeration, water pressure and water head upstream of the PKW
<i>Aeration (type and diameter of the pipe):</i>	12 PVC pipes of 250 mm of diameter + 2 collectors of 400 mm of diameter
<i>Overflowing Frequency:</i>	Annual
<i>Number of overflow known:</i>	> 10
<i>Maximum head on PKW experienced (m) and date:</i>	0.7 m (14/11/2014)
<i>Material of the PKW:</i>	Reinforced concrete
<i>Type of model used:</i>	Physical
<i>Type and number of other spillway:</i>	3 gated spillways
<i>B (m):</i>	13.46
<i>P (m):</i>	4.4
<i>W (m):</i>	42.5
<i>L (m):</i>	350
<i>Number of inlet:</i>	11 + 1 closing inlet
<i>W_i (m):</i>	1.25 to 1.65
<i>Number of outlet:</i>	11 + 1 closing outlet
<i>W_o (m):</i>	1.58
<i>T_s (m):</i>	0.2 to 0.4



Plan view of the PKW



Upstream view of the PKW



Downstream view of the PKW

Comment:

Bigger PKW built by EDF. It has a very long upstream overhang. This PKW is the first spillway of the dam to be used during flood. It has thus been equipped with instrumentation (accelerometer, air speed measurement in the aeration network) to monitor the behavior during floods.