

V Sloveniji končno pričeli komercialno izrabljati vetrno energijo

Naša prva komercialna velika vetrna elektrarna, postavljena ob Dolenji vasi na Griškem polju, je pričela obratovati. Vetrnica je tipa E-70, nemškega proizvajalca ENERCOM, moči 2,3 MW. Rotor je trokrak, premera 71 m, ki koristi površino 3.959 m². Krila so izvedena iz armiranega epoxy-ja, v katerem je integriran tudi sistem strelovoda. Vrtilna hitrost rotorja je med 6 in 21,5 vrtljaji na minuto. Krila so vrtljivo pivotirana, s skupnim sistemom, ki zajema tudi varnostno zaustavitev, oz. izklop v primeru prevelikih hitrostih vetra. Instalirana je varnostna zavora z možnostjo blokiranja rotorja. Vse nadzira trojni neodvisni sistem, z možnostjo zasilnega zagotavljanje regulacijske napetosti. Izklopna hitrost je med 28 in 34 m/s. Oddaljeni nadzor je vršen s sistemom ENERCON SCADA. Generator je tipa »direct-drive«, kar pomeni, da ne potrebuje menjalniških prenosov in s tem tudi ne menjalniškega olja, ki je tako pogosto sporno našim okolje-varnostnikom. Stolp je visok 98 m. Temeljenje vetrnice je izvedeno v valjasti obliki s premerom 15 m in višino valja 2,8 m. V temelj je instalirano 50 ton železne armature, ki je zalita s približno 500 m³ betona. Vetrnica, ki se vrти v smeri urinega kazalca, je prva v nizu, ki bo sestavljalo veliko vetrno polje. Energetsko dovoljenje za skupaj 80 MW instalirane moči vetrnega polja, je že izdano.

Seveda pri gradnji ni izostala tipična slovenska lastnost, ki se je pokazala v obliki anonimne prijave Ministrstvu za okolje, ki je po prejetju le-te razveljavilo izdano gradbeno dovoljenje. Domnevno investitor ni imel vseh soglasij lastnikov zemljišč, na katerih se bo vetrno polje raztezalo. Pravni strokovnjaki z Inštituta za upravno pravo pa navajajo, da je bila razveljavitev gradbenega dovoljenja s strani ministrstva nezakonita. Seveda so pri tem nastali dodatni stroški, ki jih bomo spet po neumnosti plačevali davkoplačevalci naše Slovenije.

Upam, da bo to lep zgled za v bodoče, tudi pri drugih gradnjah. Prav tako upam, da bo v bodoče tudi birokratskih zapletov bistveno manj.

Krško, maj 2013

Andrej PREDIN

Commercial exploitation of wind energy has finally begun in Slovenia

Slovenia's first commercial-scale wind farm, located in the village of Dolenja Vas on the Griško plain has begun operation. The wind power station is a 2.3 MW E-70 model from the German manufacturer ENERCOM. It has a three-blade rotor with a diameter of 71 m, covering an area of 3,959 m². The wings are made of reinforced epoxy, in which is integrated a system for lightning protection. The rotational speed of the rotor is between 6 and 21.5 revolutions per minute. The wings are pivoted via a common system, which also includes a protective stop in case of excessive wind speeds. A safety brake with the possibility of locking the rotor is also installed. All controls include triple independent systems, with the possibility of providing emergency control. The cut-out speed is between 28 and 34 m/s. Remote control is provided via an ENERCON SCADA system. The generator is direct-drive type, which means that no additional exchange transitions are needed. This is also the reason that no foreign oil, which is so often disputed our environmental regime, is needed. The tower is 98 m high. The foundation was cast in a cylindrical form with a diameter of 15 m and height of the cylinder 2.8 m. The foundation has installed 50 tons of iron armatures, which are enveloped by approximately 500 m³ of concrete. The rotor of the wind power station rotates clockwise and is the first power plant in the series, which will eventually form a large wind farm. An energy permit has been issued for a wind farm with total of 80 MW installed capacity.

Of course, construction was not without a particularly Slovenian feature: anonymous complaints to the Ministry of Environment, which nevertheless issued a building permit. Apparently, the investor does not have all the consent of the owners of land affected by the wind farm. Legal experts, from the Institute of Administrative Law, are of the opinion that the repeal of a building permit by the ministry is illegal. All of this entailed costs, which will once again be borne by the Slovenian taxpayers.

I hope this will be a good example for the future for other projects, with fewer of the bureaucratic entanglements, however.

Krško, May, 2013

Andrej PREDIN