State: 14.09.2018



## Offer Full Maintenance WF Noyales (5 x Fuhrländer FL2500/90 HH 105 m)

contract period 13 years - fixed remuneration



	Prices for the scope of service as	Years of operation 8-11	€ 57.000
Prices	described below for WEC/a	Years of operation 12-15	€ 61.000
		Years of operation 16-20	€ 63.000
Service & Maintenance	Maintenance	Yearly, half-yearly maintenance including converter maintenance	
		Service and maintenance reports	Inclusive
	Expendable materials	Filter, lubricants, oil, lubricant analysis	Inclusive
	24/7 remote monitoring	24/7 remote monitoring incl. diagnostics & correction of defects via remote control (if possible)	Inclusive
	Repairs - work performance	Any repairs and services on the turbine if fault clearance is not possible by remote control	Inclusive
	Repairs - spare parts	Supply of spare parts, including main components	Inclusive
	Large components	Mechanical breakdown and wear of all main components, incl. crane, transport and service	Inclusive
	Special tools	Special tools for exchanging main componentes for example traverse for exchanging a gearbox without dismantling of the rotor	Inclusive
	Guarantee of availability	Guaranteed technical farm and single WTG availability upon commencement until the end of the contract	none%, 97%
	Additional preventing maintenance	Maintenance of a transformer station (annual)	Inclusive
		Specific additional maintenance according to maintenance manual	Inclusive
		Oil exchange for gear box , condition based	Inclusive
		Yearly maintenance of service lift according to manufacturer's specifications	Inclusive
	Optionen	Inspection of rotor blades (internal- and external) incl. lightning protection measurement (until hub), by rope access, every 2 years	Option € 1.350
		Repair of external damages (e.g. by lightning strike)	Option € 3.600
		Periodic inspection of machine and tower	Option € 350
		Inspection of service lift by licensed inspection body(yearly costs)	Option € 600
		Inspection of electrical equipment according to DIN IEC 60364 (yearly costs)	Option € 300
		Expert inspection of safety devices (ascent, fire extinguisher, PSA, etc.) without exchange & maintenance	Option € 720
		Expert inspection of safety devices (ascent, fire extinguisher, PSA, etc.) with exchange & maintenance	Option € 1.650
		Expert inspection of safety devices (ascent, fire extinguisher, PSA, etc.) and DGUV V3 inspection with exchange & maintenance	Option € 1.950
Yield optimisation	Online access	Installation of hardware for online access and monitoring (if not yet provided) in order to reduce the reaction time in case of malfunction. Concurrent connection set-up within the wind farm to prevent communications failure. DSL, DSL light or similar mobile comunication required and to be provided by the Client.	Inclusive
	System check & site optimisation	Detection and correction of inappropriate settings, which cause yield losses, according to local site specific conditions.	Inclusive
Contract details	Early termination/withdrawal	To be negotiated individually	Inclusive
	Warranty	24 month, max. 3 month after termination of contract	Inclusive
	Malus according to availability	Yes	Inclusive
	Liability	Max. per year (excl. contractual penalty for the availability), if not covered by public liability	unlimited
		Contractual penalty for the availability, max. for a year	unlimited

The price for the electrical inspection on low voltage level is based on a four year inspection cycle  $\frac{1}{2}$