

1.1 Reporting 12.2007

Wind farm:	LEHAUCOURT	Customer:	SNET	Business year:	04.2007 - 03.2008
Type of turbine:	N90	Number of wind turbines:	4	Reporting period:	12.2007

Content of report:

1.1 Cover
2.1 Av Wind farm
2.2 Av Windturbine
2.3 Error list

3.1 Production
3.2 Amount
4.1 Error analysis
5.1 Powercurve

Basic Data:

Park availability in reporting period	98.56%
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Park availability of operating business year:	94.05%
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Production wind farm according to control in reporting period	14.132.553 kWh
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Comments / remarks, additional data:

DEILLE W
Nordex Energy GmbH
Nordex Service

Signature Customer

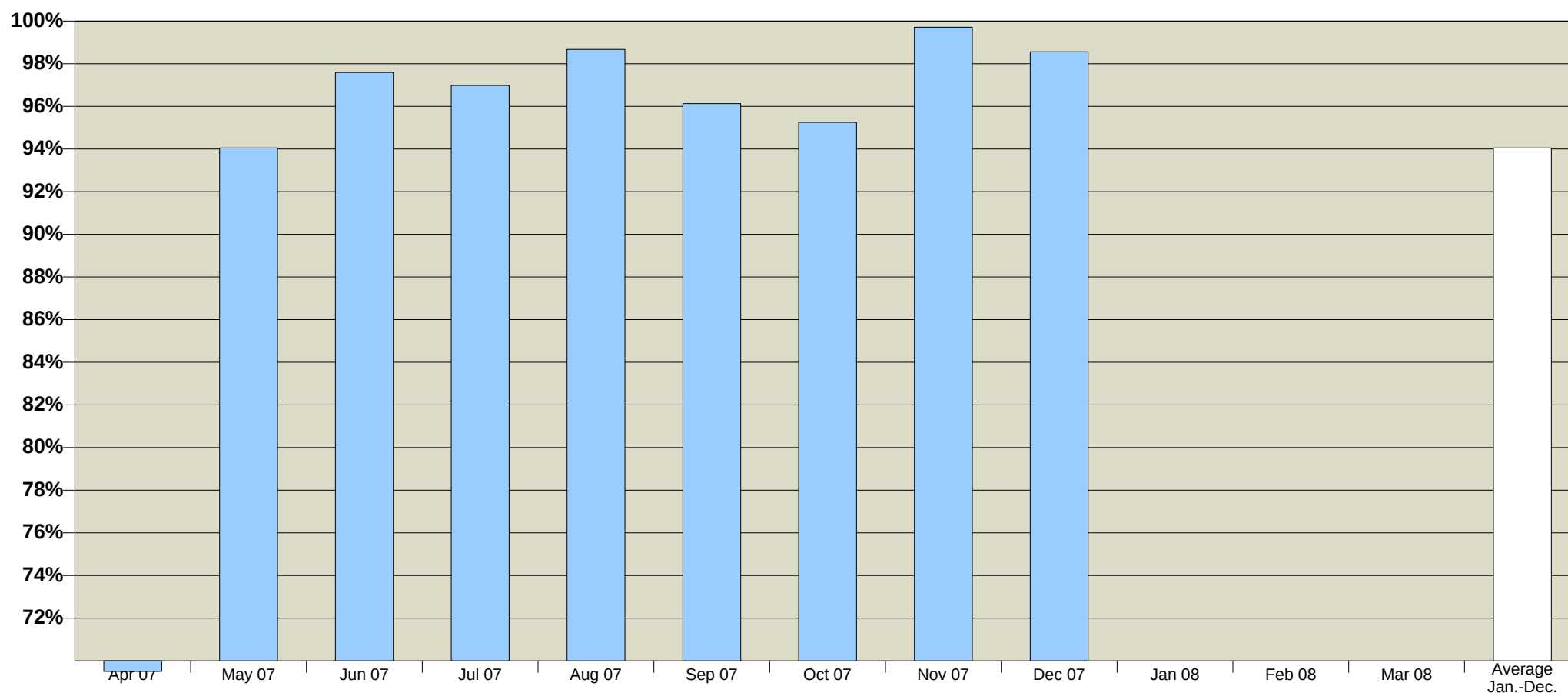
2.1 Availability Wind Farm

Wind farm: **LEHAUCOURT**
Type of turbine: **N90**

Customer: **SNET**
Number of wind turbines: **4**

Business year: **04.2007 - 03.2008**
Reporting period: **12.2007**

Period	Apr 07	May 07	Jun 07	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Average Apr.-Mar.
Availability	69.5%	94.05%	97.59%	96.98%	98.67%	96.13%	95.25%	99.71%	98.56%				94.05%



2.2 Availability wind turbine

Wind farm: **LEHAUCOURT**

Type of turbine: **N90**

Customer: **SNET**

Number of wind turbines: **4**

Business year: **04.2007 - 03.2008**

Reporting period: **12.2007**

	W E A	failure hours (T stop)	Wind turbine in improper operating condition (T fm)	max. possible h of operation (T total)	Availability of single wind turbine	Availability of all wind turbines
April 07	01WEA8383	320.52	285.67	720	60.32%	69.5%
	02WEA8384	413.55	379.04	720	47.36%	
	03WEA8385	182.37	138.9	720	80.71%	
	04WEA8386	117.24	74.71	720	89.62%	
May 07	01WEA8383	96.46	19.52	744	97.38%	94.05%
	02WEA8384	123.7	46.17	744	93.79%	
	03WEA8385	118.57	40.19	744	94.6%	
	04WEA8386	148.52	71.08	744	90.45%	
June 07	01WEA8383	0.52	0.1	720	99.99%	97.59%
	02WEA8384	1.34	1.1	720	99.85%	
	03WEA8385	22.77	22.1	720	96.93%	
	04WEA8386	46.19	46.1	720	93.6%	
July 07	01WEA8383	54.75	19.86	744	97.33%	96.98%
	02WEA8384	35.19	0.37	744	99.95%	
	03WEA8385	79.01	44.18	744	94.06%	
	04WEA8386	40.2	25.39	744	96.59%	
August 07	01WEA8383	1.5	0.16	744	99.98%	98.67%
	02WEA8384	1.75	0.71	744	99.9%	
	03WEA8385	37.39	36.32	744	95.12%	
	04WEA8386	2.48	2.48	744	99.67%	
September 07	01WEA8383	19.02	2.34	720	99.68%	96.13%
	02WEA8384	16.8	0.32	720	99.96%	
	03WEA8385	36.52	20.01	720	97.22%	
	04WEA8386	105.19	88.87	720	87.66%	

	W E A	failure hours (T stop)	Wind turbine in improper operating condition (T fm)	max. possible h of operation (T total)	Availability of single wind turbine	Availability of all wind turbines
October 07	01WEA8383	81.56	31.88	744	95.72%	95.25%
	02WEA8384	69.34	19.86	744	97.33%	
	03WEA8385	117.58	67.93	744	90.87%	
	04WEA8386	70.33	21.58	744	97.1%	
November 07	01WEA8383	4.23	3.84	720	99.47%	99.71%
	02WEA8384	1.52	1.08	720	99.85%	
	03WEA8385	3.44	2.81	720	99.61%	
	04WEA8386	1.04	0.59	720	99.92%	
December 07	01WEA8383	20.56	20.47	744	97.25%	98.56%
	02WEA8384	1.94	1.89	744	99.75%	
	03WEA8385	5.29	5.19	744	99.3%	
	04WEA8386	15.22	15.18	744	97.96%	

Data business year / wind turbine; status: reporting period

	01WEA8383	599.12	383.84	6600	94.18%	94.1%
	02WEA8384	665.13	450.54	6600	93.17%	
	03WEA8385	602.94	377.63	6600	94.28%	
	04WEA8386	546.41	345.98	6600	94.76%	
Σ Park		2413.6	1557.99	26400		

2.3 Errorlist

Wind farm: **LEHAUCOURT**
Type of turbine: **N90**

Customer: **SNET**
Number of wind turbines: **4**

Business year: **04.2007 - 03.2008**
Reporting period: **12.2007**

	Status start	Status end	Status code	Error identification according to turbine controller	memo	A-Code	Duration	T _{stop}	T _{fm}	T _{fm Grid}	T _{fm Maintenance}
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01WEA8383

01.12.07 03:00:45	01.12.07 03:03:45	FM1211	MI GridDiscon DespiteReleaseF...		AF	00:03:00	00:03:00				
01.12.07 05:33:28	01.12.07 05:34:45	FM411	Wind DirSlanting Stop		AF	00:01:17	00:01:17				
02.12.07 16:11:34	02.12.07 16:17:15	FM104	Gen Rpm H Stop		AF	00:05:41	00:05:41				
03.12.07 15:24:11	04.12.07 09:20:48	FM50	SafetyChain Activated		AF	17:56:36	17:56:36				
04.12.07 09:20:48	04.12.07 09:21:28	FM4	WTG Maintenance		AF	00:00:41	00:00:41				
04.12.07 09:21:28	04.12.07 09:50:00	FM6	WTG Manual Stop		AF	00:28:31	00:28:31				
07.12.07 09:07:00	07.12.07 09:12:31	FM1001	Wind SpeedH/StormDisconnect ...		NAF	00:05:31		00:05:31			
07.12.07 09:17:13	07.12.07 09:39:21	FM60	Vib Z-direction filtered Stop		AF	00:22:08	00:22:08				
14.12.07 19:33:33	14.12.07 19:52:17	FM57	Vib Y-direction eff. Stop		AF	00:18:43	00:18:43				
16.12.07 10:17:47	16.12.07 11:28:09	FM57	Vib Y-direction eff. Stop		AF	01:10:22	01:10:22				
16.12.07 11:28:09	16.12.07 11:28:15	FM6	WTG Manual Stop		AF	00:00:06	00:00:06				
29.12.07 14:49:06	29.12.07 14:50:19	FM411	Wind DirSlanting Stop		AF	00:01:13	00:01:13				

20.56

Sum	20:28:18	00:05:31	00:00:00	00:00:00
	20.47	0.09	0	0

02WEA8384

01.12.07 05:33:38	01.12.07 05:34:48	FM411	Wind DirSlanting Stop		AF	00:01:10	00:01:10				
01.12.07 20:59:21	01.12.07 21:00:27	FM411	Wind DirSlanting Stop		AF	00:01:06	00:01:06				
02.12.07 12:26:49	02.12.07 13:13:31	FM419	Yaw HydBrk not closed		AF	00:46:42	00:46:42				
02.12.07 16:12:31	02.12.07 16:15:30	FM1001	Wind SpeedH/StormDisconnect ...		NAF	00:02:60		00:02:60			
03.12.07 17:06:29	03.12.07 17:07:53	FM411	Wind DirSlanting Stop		AF	00:01:24	00:01:24				
07.12.07 07:09:44	07.12.07 07:10:56	FM411	Wind DirSlanting Stop		AF	00:01:12	00:01:12				
07.12.07 09:06:48	07.12.07 09:19:44	FM104	Gen Rpm H Stop		AF	00:12:57	00:12:57				
23.12.07 03:50:08	23.12.07 04:37:49	FM161	Gear OilPmp Stage1 FuseTrip		AF	00:47:41	00:47:41				
29.12.07 14:49:22	29.12.07 14:50:36	FM411	Wind DirSlanting Stop		AF	00:01:14	00:01:14				

1.94

Sum	01:53:26	00:02:60	00:00:00	00:00:00
	1.89	0.05	0	0

03WEA8385

	Status start	Status end	Status code	Error identification according to turbine controller	memo	A-Code	Duration	T _{stop}	T _{fm}	T _{fm Grid}	T _{fm Maintenance}
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03WEA8385

01.12.07 20:59:29	01.12.07 21:00:42	FM411	Wind DirSlanting Stop		AF	00:01:13	00:01:13			
02.12.07 09:42:35	02.12.07 10:13:05	FM104	Gen Rpm H Stop		AF	00:30:30	00:30:30			
02.12.07 13:56:16	02.12.07 14:19:01	FM104	Gen Rpm H Stop		AF	00:22:45	00:22:45			
02.12.07 14:19:30	02.12.07 14:20:11	FM1175	Pitch3 Batt.contactor Error		AF	00:00:41	00:00:41			
02.12.07 16:08:10	02.12.07 16:13:57	FM1001	Wind SpeedH/StormDisconnect ...		NAF	00:05:47		00:05:47		
03.12.07 10:33:24	03.12.07 10:34:29	FM1201	MI class A Fault		AF	00:01:05	00:01:05			
03.12.07 10:34:29	03.12.07 11:38:31	FM104	Gen Rpm H Stop		AF	01:04:02	01:04:02			
03.12.07 11:38:47	03.12.07 11:39:18	FM261	RotBrk Brakepressure Fault		AF	00:00:31	00:00:31			
03.12.07 11:39:58	03.12.07 11:40:43	FM261	RotBrk Brakepressure Fault		AF	00:00:45	00:00:45			
03.12.07 11:41:06	03.12.07 12:27:25	FM261	RotBrk Brakepressure Fault		AF	00:46:19	00:46:19			
03.12.07 12:29:19	03.12.07 12:30:15	FM1175	Pitch3 Batt.contactor Error		AF	00:00:56	00:00:56			
07.12.07 09:00:15	07.12.07 09:24:33	FM104	Gen Rpm H Stop		AF	00:24:19	00:24:19			
07.12.07 09:24:51	07.12.07 09:31:44	FM261	RotBrk Brakepressure Fault		AF	00:06:53	00:06:53			
07.12.07 09:32:08	07.12.07 09:32:34	FM261	RotBrk Brakepressure Fault		AF	00:00:26	00:00:26			
14.12.07 09:35:30	14.12.07 09:48:56	FM1175	Pitch3 Batt.contactor Error		AF	00:13:26	00:13:26			
14.12.07 09:50:46	14.12.07 10:58:48	FM1175	Pitch3 Batt.contactor Error		AF	01:08:02	01:08:02			
14.12.07 10:58:48	14.12.07 10:59:38	FM6	WTG Manual Stop		AF	00:00:50	00:00:50			
28.12.07 05:35:47	28.12.07 05:47:25	FM1175	Pitch3 Batt.contactor Error		AF	00:11:39	00:11:39			
28.12.07 05:49:15	28.12.07 05:58:34	FM1175	Pitch3 Batt.contactor Error		AF	00:09:19	00:09:19			
29.12.07 14:49:46	29.12.07 14:50:55	FM411	Wind DirSlanting Stop		AF	00:01:10	00:01:10			
29.12.07 14:51:19	29.12.07 14:57:41	FM261	RotBrk Brakepressure Fault		AF	00:06:22	00:06:22			
29.12.07 14:57:56	29.12.07 14:58:12	FM261	RotBrk Brakepressure Fault		AF	00:00:15	00:00:15			

5.29

Sum

05:11:29

00:05:47

00:00:00

00:00:00

5.19

0.1

0

0

04WEA8386

01.12.07 20:35:57	01.12.07 20:37:02	FM1201	MI class A Fault		AF	00:01:05	00:01:05			
01.12.07 20:41:19	01.12.07 20:44:19	FM1211	MI GridDiscon DespiteReleaseF...		AF	00:03:00	00:03:00			
01.12.07 20:46:56	01.12.07 20:48:01	FM1201	MI class A Fault		AF	00:01:05	00:01:05			
01.12.07 20:51:34	01.12.07 20:52:39	FM1201	MI class A Fault		AF	00:01:05	00:01:05			
01.12.07 20:56:34	01.12.07 20:57:39	FM1201	MI class A Fault		AF	00:01:05	00:01:05			
01.12.07 20:57:39	01.12.07 22:21:41	FM104	Gen Rpm H Stop		AF	01:24:02	01:24:02			
01.12.07 22:24:25	01.12.07 22:25:30	FM1201	MI class A Fault		AF	00:01:05	00:01:05			
01.12.07 22:25:30	02.12.07 02:23:52	FM104	Gen Rpm H Stop		AF	03:58:22	03:58:22			
02.12.07 16:10:03	02.12.07 16:12:23	FM1001	Wind SpeedH/StormDisconnect ...		NAF	00:02:21		00:02:21		
07.12.07 00:09:17	07.12.07 00:10:23	FM1201	MI class A Fault		AF	00:01:05	00:01:05			
07.12.07 00:10:23	07.12.07 00:17:04	FM104	Gen Rpm H Stop		AF	00:06:41	00:06:41			
07.12.07 00:21:00	07.12.07 00:24:00	FM1211	MI GridDiscon DespiteReleaseF...		AF	00:03:00	00:03:00			
07.12.07 00:26:40	07.12.07 00:27:45	FM1201	MI class A Fault		AF	00:01:05	00:01:05			

	Status start	Status end	Status code	Error identification according to turbine controller	memo	A-Code	Duration	T _{stop}	T _{fm}	T _{fm Grid}	T _{fm Maintenance}
04WEA8386											
	07.12.07 00:27:45	07.12.07 01:14:48	FM104	Gen Rpm H Stop		AF	00:47:03	00:47:03			
	07.12.07 01:17:26	07.12.07 01:18:31	FM1201	MI class A Fault		AF	00:01:05	00:01:05			
	07.12.07 01:22:56	07.12.07 01:24:01	FM1201	MI class A Fault		AF	00:01:05	00:01:05			
	07.12.07 01:24:01	07.12.07 09:46:23	FM6	WTG Manual Stop		AF	08:22:21	08:22:21			
	07.12.07 09:51:49	07.12.07 09:54:49	FM1211	MI GridDiscon DespiteReleaseF...		AF	00:03:00	00:03:00			
	08.12.07 20:48:04	08.12.07 20:49:15	FM411	Wind DirSlanting Stop		AF	00:01:11	00:01:11			
	09.12.07 20:35:54	09.12.07 20:37:00	FM1201	MI class A Fault		AF	00:01:06	00:01:06			
	09.12.07 20:37:00	09.12.07 20:47:02	FM104	Gen Rpm H Stop		AF	00:10:03	00:10:03			
	29.12.07 12:32:06	29.12.07 12:33:26	FM411	Wind DirSlanting Stop		AF	00:01:21	00:01:21			
							15.22				
							Sum	15:10:56	00:02:21	00:00:00	00:00:00
								15.18	0.04	0	0

NAF: non availability failure
 AF: availability failure
 GE: Grid Error
 M: Maintenance

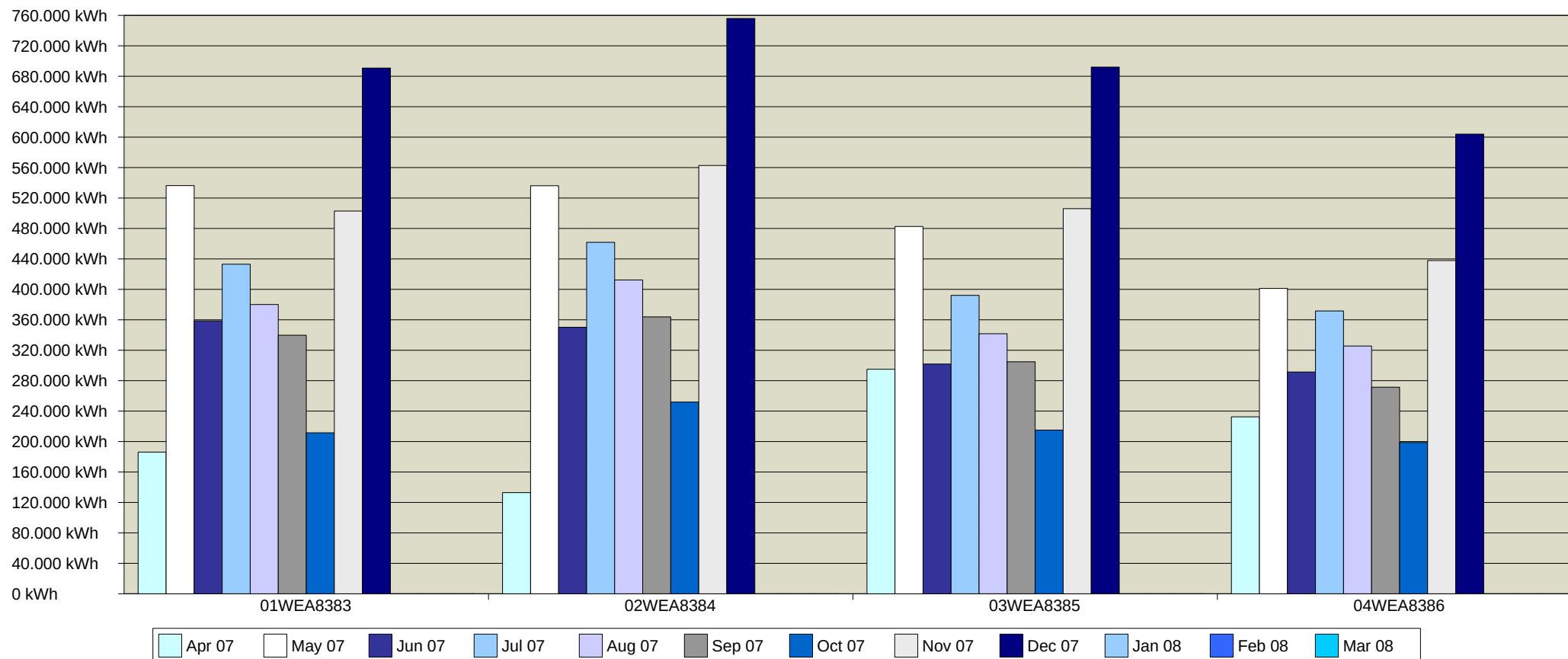
3.1 Production: WTG / month in kWh

Wind farm: **LEHAUCOURT**
Type of turbine: **N90**

Customer: **SNET**
Number of wind turbines: **4**

Business year: **04.2007 - 03.2008**
Reporting period: **12.2007**

	Apr 07	May 07	Jun 07	Jul 07	Aug 07	Sep 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Σ Apr-Mar
01WEA8383	186.144 kWh	536.323 kWh	358.585 kWh	433.022 kWh	380.101 kWh	339.710 kWh	211.514 kWh	502.892 kWh	690.797 kWh				3.639.088
02WEA8384	132.864 kWh	536.125 kWh	350.191 kWh	461.827 kWh	412.294 kWh	363.850 kWh	251.921 kWh	562.762 kWh	755.943 kWh				3.827.777
03WEA8385	295.030 kWh	482.649 kWh	301.860 kWh	392.079 kWh	341.697 kWh	304.840 kWh	215.084 kWh	506.045 kWh	692.064 kWh				3.531.348
04WEA8386	232.489 kWh	401.233 kWh	291.447 kWh	371.595 kWh	325.562 kWh	271.439 kWh	198.738 kWh	437.851 kWh	603.986 kWh				3.134.340
Σ WTG	846.527	1.956.330	1.302.083	1.658.523	1.459.654	1.279.839	877.257	2.009.550	2.742.790				14.132.553



3.2 Amount

Wind farm: **LEHAUCOURT**
Type of turbine: **N90**

Customer: **SNET**
Number of wind turbines: **4**

Business year: **04.2007 - 03.2008**
Reporting period: **12.2007**

Content	Production in kWh	Net amount	Amount incl. VAT
Production wind farm according to control in reporting period	14.132.553	1.187.134,45 €	1.419.812,80 €
Production according to invoicing of energy supply company in reporting period	0	0 €	0 €
Net payment [€ / kWh]	0.084 €	Difference between data from the wind turbines and data from the energy supply company in percent	100 %

COURBE DE PUISSANCE PAR TURBINE

