IP06 MAINE ET LOIRE DSM PROJECT - FRANCE

APPENDIX

Table 1. Number of Voltage Fluctuation and Unplanned Outage Events			
Name of feeder	**Number of Events***		**Gains**
	Before DSM	**After DSM**	**%**
La Jumelière	11,313	699	94
Coron	1,469	544	63
Chanteloup	3,049	81	97
Gennes	1,054	41	93
* Disturbances outside standards: micro outages, short outages; voltage fluctuations outside standards (230 V -10 %; 230 V +6 %). Sampling rate : 10 milliseconds (ms). All events with a duration higher than 10 ms were analysed and stored. Measurements carried out during seven consecutive days.			

Table 2. Duration of Voltage Fluctuation and Unplanned Outage Events			
Name of feeder	**Total Duration of Events* (minutes)**		**Gains**
	Before DSM	**After DSM**	**%**
La Jumelière	3,514	21	99
Coron	953	86	91
Chanteloup	1,098	6	99
Gennes	1,401	9	98
* Disturbances outside standards: micro outages, short outages; voltage fluctuations outside standards (230 V -10 %; 230 V +6 %). Sampling rate : 10 milliseconds (ms). All events with a duration higher than 10 ms were analysed and stored. Measurements carried out during seven consecutive days.			

Figure 1. Voltage regulator

Figure 2. Three Phase/Single Phase Transformer

Figure 3. Electronic "Soft" Starter for Electric Motors

Figure 4. Wood-fired Boiler

Figure 5. Portable Diesel Generator