
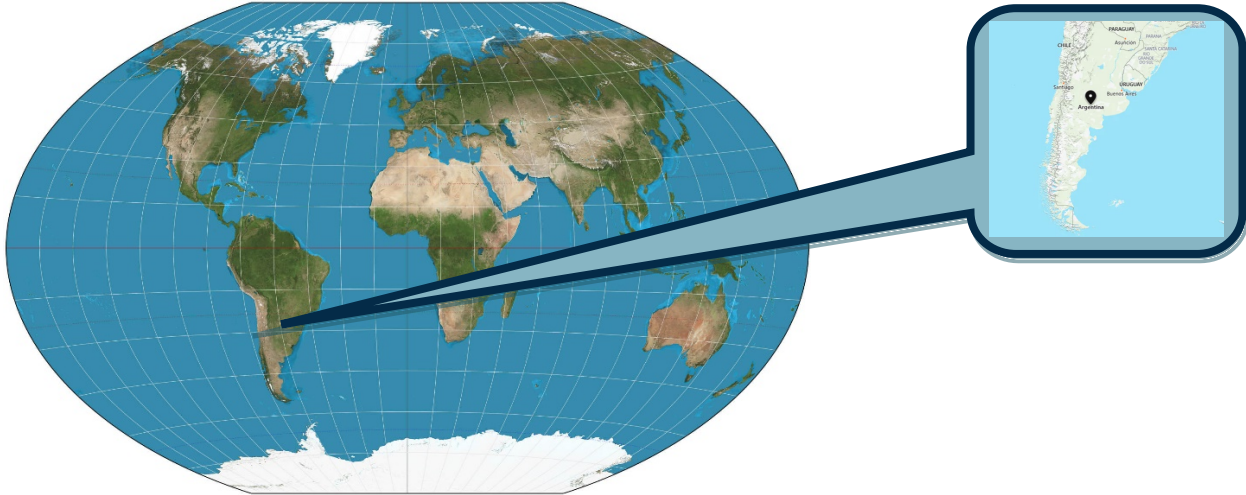


COMBINED CYCLE POWER PLANT **Argentina**
 Post Cleaning Summary 



BACKGROUND:

- 1997 Commissioned
- Natural Gas
- Horizontal Gas Flow
- Base load:
- No cleaning history
- 2013 June: PIC Deep Cleaning
- 2 Modules Cleaned
- 14 rows largest module

HRSG	GT & Design	Output
<ul style="list-style-type: none"> • Nooter Eriksen • Single wide 	<ul style="list-style-type: none"> • GT PG9171E • 1 X 1 	<ul style="list-style-type: none"> • 127 MW Total

ASSESSMENT: HRSG fouling causing issues

- Loss of MW output from design
- Reduced thermal efficiency
- Increased back pressure on gas turbine
- Plant unable to operate higher than 95 MW
- Increased fuel consumption
- Increased stack temperature

CLEANING RESULTS: Benefits to the Plant

GT Back Pressure: at 95 MW

	Before	After	Change
GT	13.38" (340mm)	6.29" (160mm)	-7.09 "(180mm) H2O

- 10.23" (260mm) H2O drop Post-clean at full load of 112MW (assuming this is full load on this GT)

Output

Before	After	Change
n/a	n/a	+ 17 MW

The cleaning was ABSOLUTELY SUCCESFULL. We had been running with a counter pressure of 340 H2O mm , and gas turbinelimited at 95 Mw.

After cleaning we have got a counter pressure of 160 H2O mm at the same power 95 Mw , and at 112 Mw, the counter pressure isabout 260 H2O mm. Far away from the 340 H2O mm!!!!!!!!!!!!

NICE WORK!!!!

Gustavo Agüero