

## Central Geotérmica da Ribeira Grande

S. Miguel, Açores

### **Ribeira Grande Geothermal Plant**

*S. Miguel Island, Azores*

The geological characteristics of the Azores (located in one of the world's regions of greatest seismic activity) have allowed the construction of a power station in which the working fluid is the steam produced within the earth's crust, captured at a depth of 600 metres.

The Ribeira Grande geothermal power station is one of the few in the world. Since its construction it has constituted the benchmark for this type of facility.

The project was developed in two stages, leading to a total electric power production of 14 MW (13 MW in the grid), accounting for some 20% of the total electricity consumption of the island of São Miguel.

The 1<sup>st</sup> stage (6 MW) was completed in 1993 and the 2<sup>nd</sup> stage (8 MW) in 1999.



Vista geral da central geotérmica da Ribeira Grande  
Em primeiro plano, a bateria de condensadores

*General view of the Ribeira Grande Geothermal Plant  
Foreground: the condenser yard*

#### **Intervenção SETH / SETH's work share**

Edifício de Comando / *Control building*  
Fundações da tubagem / *Pipework foundations*  
Suportes de tubagens / *Pipe bridges*  
Edifício da bomba S.I. / *Fire pump building*  
Edifício do gerador / *Emergency generator building*

### **Resumo da Obra**

#### **Work Summary**

Cliente	<b>Ormat Atlantic / EDA</b>	<i>Client</i>
Tipo de contrato	<b>Chave-na-Mão Turn-Key</b>	<i>Contract type</i>
Data de construção	<b>1992 - 1993 (1ª Fase) 1998 (2ª Fase)</b>	<i>Construction period</i>
Custo	<b>PTE 160.000.000 (1ª F) PTE 140.000.000 (2ª F)</b>	<i>Cost</i>
Projectista	<b>Ormat Atlantic, Inc.</b>	<i>Architect &amp; Engineer</i>