Swiss Government gives green light to construction of a 400 MW gas-fired plant

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Recent gas-fired combined cycle power plant construction projects in Switzerland have not proceeded beyond the planning stage as a result of the Swiss CO2 law, which provides that 70% of their emissions must be offset by means of measures taken inside Switzerland. So far, such measures have been considered to be too costly, pushing a number of electricity companies to suspend major gas power plant projects.
However, a project for the construction of a 400 MW gas-fired combined cycle plant on the site of an existing plant in the alpine canton of Wallis has taken a large step forward. The plans to offset the 600,000 to 700,000 tons of CO2 expected to be emitted by the Chavalon plant once completed (which will represent roughly 2 to 3 per cent of total Swiss emissions) have been found to be financially feasible.

The offsetting measures, which have been the subject of studies and will soon be submitted for the approval of the Swiss Federal Ministry of Environment, include advances such as the use of heat pumps and improved energy use of sewage and water infrastructure. The projected measures will allow for the plant's emissions to be offset in their entirety.

In addition, the Chavalon project was made possible by a recent ordinance of the

Swiss government exempting new fossil-fuel power plants built on the site of an existing plant from the requirement of waste heat recovery. Such waste heat recovery would not have been feasible for the Chavalon project given the projected plant's isolated location high above the Rhone valley.

While the waste heat recovery exception carved out by the Swiss Government for the Chavalon plant was controversial given Switzerland's energy policy, which is focused on nuclear and hydro-electric power, the Government adopted the exception in order to keep the option of building gas-fired plants open, and because of the advanced nature of the Chavalon project's carbon-offsetting plans. Electricity companies have been pushing for the right to build such plants since the middle of the decade in order to satisfy demand until new nuclear power plants, which would have higher production capacities of up to 1600 MW, become operational.

The Chavalon plant, which could be operational by 2016, will give a significant boost to Swiss electricity production in the coming years.

The electricity generated in Chavalon will not only compete with relatively low cost hydro-electrical and nuclear power, but also with the more expensive imported power produced with gas-fired combined cycle plants. The higher prices for such imported power will be decisive to the profitability of the Chavalon plant, and the development of a Europe-wide offsetting system will further enhance the plant's cost-effectiveness.