Central Receiver Systems that use large heliostat fields and solar receivers located on top of a tower are now in the position to deploy the first generation of grid-connected commercial plants. The technical feasibility of the CRS power plants technology can be valued as sufficiently mature after the pioneering experience at the early 1980s of several pilot plants in the 0.5–10 MW power range and the subsequent improvement of key components like heliostats and solar receiver in many projects merging international collaboration during the past 15 years. Solar-only plants like Solar Tres and PS10 or hybrid schemes like SOLGAS, CONSOLAR, or SOLGATE are being developed and supply a portfolio of alternatives leading to the first scaling-up plants during the period 2000–2010. Those projects with still non-optimized small sizes of 10–15 MW are already revealing a dramatic reduction of costs versus previous feasibility studies and give the path for the formulation of a realistic milestone of achieving a LEC of $0.08/kWh by the year 2010 and penetrating initial competitive markets by 2015 with LECs between $0.04/kWh–$0.06/kWh.


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