



Title: CEL Solar Photovoltaic Power Project in El Salvador

Principal Investigator: Abbas Ghassemi

Sponsor: Comision Ejecutiva Hidroelectrica del Rio Lempa

Summary: NMSU is assessing the El Salvadoran solar resource, studying different technology options, anticipating performance, and evaluating the economics of the solar power technologies. The NMSU team is evaluating the potential environmental impacts, assessing tariffs, and assisting with drafting legal documents and agreements within the El Salvadoran context.

NMSU is partnering with Wind Forces, which specializes in sophisticated and the most accurate solar and wind resource modeling using advanced atmospheric models with supercomputers. NMSU is also partnering with Humberto Rodriguez, who has worked extensively in El Salvador and is an experienced energy consultants based in Bogotá. He has extensive government and industry contacts in El Salvador.

NMSU has brought together a highly qualified and unique renewable energy development team experienced with Latin American solar energy development and solar and resource assessment. The team will:

- Conduct sophisticated solar energy modeling for El Salvador using advanced computer models
- Verify El Salvadoran solar resources (both global at latitude tilt and direct normal)
- Define the energy and environmental regulatory environment for El Salvador
- Create partnerships with leading U.S. solar industry companies
- Select the solar technologies that offer the best combination of energy production, capital cost, operating cost, and financing
- Complete a detailed and realistic ~3 MW solar energy feasibility assessment for a renewable energy park

This type of data is crucial for making accurate long-term energy projections and establishing a realistic ROI for a potential 3 MW solar farm. The information generated will be sufficiently detailed to present energy performance and economics of a solar farm to potential investors, while assessing the environmental impacts and benefits as well as regulatory hurdles.