

Sun Ridge Arizona Solar Commission Simulation

Scenario Overview:

The community of Sun Ridge, Arizona—a rural, economically diverse area—is facing a crossroads. With extreme heat waves and rising utility costs, local leaders are exploring a large-scale solar energy project that could provide clean, low-cost power to the community. However, while a solar farm seems like a step forward, it comes with significant political, environmental, and logistical hurdles.

Sun Ridge sits in an ecologically sensitive desert area. Concerns include water use for cleaning panels, impacts on native species and tribal lands, and debates over land rights. Meanwhile, economic inequality persists: many low-income residents can't currently afford home solar installations or electric vehicle transitions.

The newly elected State Energy Commissioner has convened a Solar Development Commission to decide how to proceed with public investment. Should the community move forward with a partnership that would get the project up and running on an expedited timeline? Or should the plan shift to one that includes local tribes and tribal land? How should jobs, land use, and power distribution be handled to ensure equity and sustainability?

The Decision at Hand:

The Commissioner has called this five-party commission to decide the path forward for a \$30 million fund and establish a roadmap for building a large-scale solar farm outside Sun Ridge. It was tentatively decided to move forward with the project in partnership with a local real estate developer, Mesa Real Estate, to site the project on land they already own. Concerns were raised about how this project was decided and the lack of community input has been criticized in the local media and by many in the community.

The real estate developer, Mesa Real Estate, has been excluded from this commission due to the concerns about how their role in the project was decided and their potential outsized influence in the community. The Commissioner will act as facilitator but is also a voting stakeholder. The group must come to a consensus or strong majority agreement by the end of the simulation to secure funding from the state legislature.

Options include:

- 1. Real Estate Developer Solar Farm Partnership**
- 2. Tribal-Led Solar Development Zone**

3. **Environmental Mitigation and Land Study**
4. **Local Job Training and Transition Program**
5. **Energy Credit Subsidies for Low-Income Residents**

Stakeholder Teams:

Each team receives private goals and concerns. Stakeholders may include:

- **State Energy Commissioner** (Facilitator and key swing vote)
- **Tribal Land Representative**
- **Renewable Energy Company Executive**
- **Environmental Advocacy Group Director**
- **Local Business and Resident Coalition Leader**

Proposed Initiatives:

1. **Real Estate Developer Solar Farm Partnership (\$18M–\$24M)**
Partner with a local real estate developer, Mesa Real Estate, to develop a 150 MW solar farm. Offers clean power to 30,000 homes, but needs major environmental review. Water-intensive cleaning may be restricted.
2. **Tribal-Led Solar Development Zone (\$15M–\$20M)**
A regional solar initiative led by tribal nations. Empowers local communities and respects sovereign land. Could create lasting local jobs and infrastructure. Legal and political hurdles exist. Water-intensive cleaning may be less restricted as laws on tribal lands are technically less restrictive.
3. **Environmental Study & Mitigation Fund (\$4M–\$8M)**
Addresses habitat preservation for desert tortoises and other endangered species. Studies stormwater runoff, glare impact, and long-term soil degradation. Required for permitting process.

4. Job Training and Energy Sector Transition Program (\$4M–\$6M)

Creates solar technician and maintenance training in partnership with state colleges. Priority given to local residents and coal industry workers transitioning from shuttered plants.

5. Low-Income Energy Subsidy Program (\$2M–\$4M)

Offers monthly credits to low-income households for solar-sourced electricity. Addresses energy equity but limited in scope without widespread infrastructure.

Simulation Logistics:

- Five parties must negotiate how to allocate the \$30 million budget to get this project over the finish line in a way that satisfies all the major community stakeholders who need to sign off on the project.
- Any three-party agreement is binding if it includes the Commissioner.
- Unanimous agreement is preferable.
- Stakeholders may propose hybrid solutions or packages.

Debrief Questions:

1. What were the biggest challenges to consensus?
2. How did economic vs. environmental values show up in negotiation?
3. Were stakeholders able to identify win-win compromises?
4. What role did justice, sovereignty, and equity play in your strategy?
5. Which solutions seemed most scalable or politically feasible?

ROLE D - Renewable Energy Company Executive – Confidential Instructions

You are a regional VP for SolarGrid LLC. Your company is a leader in utility-scale solar, with projects across the Southwest. Your model relies on economies of scale, centralized infrastructure, and speed to market. You have investors waiting for updates and need to secure land access ASAP.

You are used to pushback but prefer collaborative PR wins. You can offer jobs, education programs, and lease payments—but you want a return on your investment.

You've been with SolarGrid LLC for 10 years and just got transferred to this project six months ago after successfully getting another similar solar project off the ground in Nevada, where you are from. You have moved your family to the area but you don't plan to stay as you'd like to get back to Nevada after this project wraps up. You maybe don't want this fact to be widely known though as the community can be skeptical of outsiders who don't have roots in Sun Ridge.

Your Priorities:

1. **Real Estate Developer Partnership** – This is what brought you to the table. You have a site design ready and contractors lined up. The faster this deal moves, the better because the faster it goes the sooner your company and shareholders start to make money. This would earn your company \$12 million. Your company estimates that the project would go online roughly one year from now.
2. **Job Training Program** – Helps solve your labor shortage and looks great on press releases. You're open to co-funding it.
3. **Subsidies** – These increase electricity demand. You're willing to co-brand with the Commissioner's subsidy rollout.
4. **Tribal Zone** – You could partner as a subcontractor—but only if profit terms are clear and the process doesn't delay timelines. This would earn your company \$10 million. Your company estimates that the project would experience a one-year setback if we were to pursue this option due to additional approvals needed from tribal leaders and federal agencies.
5. **Environmental Study** – You will accept minimal mitigation but resist anything that risks major delays or increases costs. You estimate this will push the timeline for the project out by at least nine months from whatever path forward is decided on by the commission.

You Must:

- Secure access to land and guarantees of interconnection.
- Keep costs low and avoid delays.
- Offer enough community investment to get others onboard.

Confidential Tip: Offer economic sweeteners: jobs, community reinvestment, fast timelines. You can move fast, which the Commissioner likes—use that to your advantage.