

Skip The Grid + The Divide + Direct DC

[https://canvas.calpoly.edu/courses/16
3420/pages/week-4](https://canvas.calpoly.edu/courses/163420/pages/week-4)

<https://www.youtube.com/watch?v=lZHzbGb3PUA&t=2824s>

Oct. 16, 2025

What is Skip The Grid

- A large scale service project funded by Cal Poly + corporate sponsors.
- Week long trip, 20 volunteer students installed 40 solar home systems
- Partnered with Heart of America and school in Navajo Nation



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Why?

1. Navajo territory is huge, so grid tied electricity infrastructure is very expensive. (40,000 per home)
2. Rural Electrification Act: Low interest loans paid out to utility companies to expand grid electricity to rural areas. Loans were not available on reservation land.
3. Other Federal Policy ... more on this later

Outcomes

- A wonderful result - 40 homes electrified in 3 days, providing lights, internet, refrigeration, device charging, cooking, etc to 100 children and their families.
- Education Day
- \$250,000 project -> 40 home systems at \$2500 = 150,000 of overhead

Is This an Effective / Appropriate Development Model?

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Potential Improved Models

1. Less Overhead

- ❑ With a 250,000 funding per year, how many homes could be electrified if a smaller group, say 6 experienced students from cal poly and 2 professors went for 2 weeks.
- ❑ 250,000 starting -8 flights arizona (4000), 2 rental trucks ($360 \$ \text{ per day} * 14 \text{ days}$) = $5040 + 4000 \rightarrow \sim 9040$ + 1000 for food and such.
- ❑ 5 systems a day is a whole day of work -> **96 systems** at 2500 each (this price would be subject to change). With two teams, 10 systems a day is quite reasonable.

2. Cheaper / More Appropriate System (is there one?)

- ❑ Direct DC, DSO, ISEC's

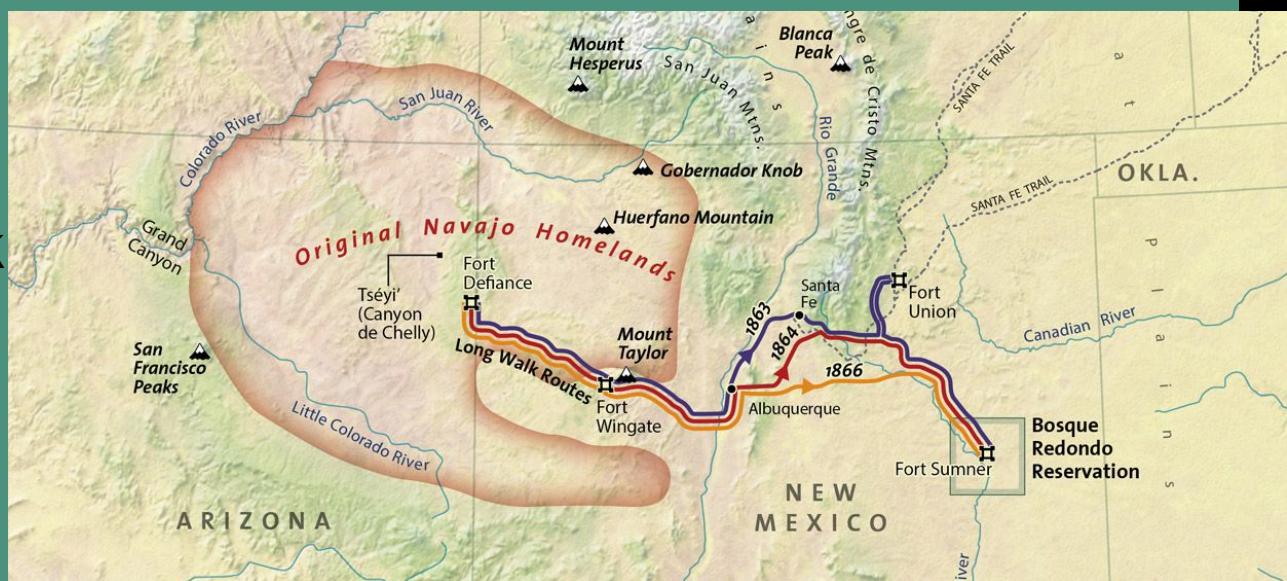
3. Local Participants (best option)

The Divide

- Jason Hickel sites main reasons for global poverty
 - 1. Colonialism
 - 2. Coups
 - 3. Structural Adjustment + Debt
 - 4. Capital Outflow / Resource Extraction + The Aid Mirage

Colonialism in the NN

- Long Walk +
Bosque Redondo
(4 years)
- Navajo Livestock
Reduction
- Coal and Oil
Extraction
- Uranium Mining



Political Interference (Coups)

- There were no violent or direct coups -but parallels
 - 1. Navajo “Business Council” and oil leases
 - 2. Robert Bennet - Bennet Freeze
 - 3. Donald Paul Hodel (Secretary of the Interior, 1985–1989)
 - 4. Deb Haaland (Secretary of the Interior, 2021–present) (democratization)

Structural Adjustment - limited resource sovereignty

- **Land Leases:** For decades, any long-term lease on Navajo land (for example, to build a store, home, or factory) required approval from the Bureau of Indian Affairs - some leases still require approval
- Trust land cannot be used as collateral, Navajo individuals historically struggled to access credit
- Indian Reorganization Act (1934)
- NN actually has low debt, mostly held in bonds

Resource Outflows vs Inflows

- Department of the Interior provided about \$341 million to the Navajo Nation government for 2025 (about this much annually)
- This funding is critical for education, infrastructure, and health services
- Lack of local business (land leases) and jobs
- Coal, Uranium, and Natural Gas outflows
 1. U.S. paid \$554 million to Navajo Nation for historical underpayment
 2. \$600 million in lost revenues from coal alone

... We have much to learn from people on the periphery of the world system – the ones our governments have so long referred to as ‘underdeveloped’

- Jason Hickel





