

Program fights high cost of village energy

The buzz of an airplane circling to land stops the conversation at the village store. Soon a worker is off on a 3-wheeler, towing a large sled to the airport. Out of the plane come three drums of gasoline, flown in from Fort Yukon. The village of Chalkyitsik, near the Arctic Circle, has just received another load of gasoline.

Last year the barge did not come so this winter gasoline had to be flown in. The runway is short so the gas comes on a small Cessna 207. The cost: \$4 per gallon.

Residents have little choice but to pay the high price. They need gasoline for getting wood to heat their homes and for putting food on their tables.

In Chefnak, a Yu'pik village on the southwest coast of Alaska, the closest living tree bigger than a scrub willow is more than 100 miles away. Many residents use 2 or 3 drums of oil a month to heat their homes (at a cost of over \$2 per gallon). When the temperature drops near zero and the wind comes howling off the Bering Sea, the houses are difficult to keep warm and families often must sleep near the stove.

Hunting and fishing for food may take over 10 drums of gasoline each year, at a cost of over \$2.25 per gallon. And electricity is \$.55 per KWH for the first 90 KWH each month.

By the time many people pay for oil, gasoline, and electricity, less than half of their income for the year is left for everything else they need to buy.

World oil prices may be falling, but energy costs in rural Alaskan villages are still too high — among the highest in the nation. RurAL CAP, Tanana Chiefs Conference, and Nunam Kitlutsisti have begun a state-funded project to help eight villages do something about their high energy costs — either by finding lower-priced energy supplies or by saving energy to save money.

"The greatest drain on the village families' cash income is energy," said George Irvin, Director of RurAL CAP's Natural Resources Department. "In villages there are few jobs where people can earn the money to pay their energy bills. High energy costs could mean that people may no longer be able to afford to live in villages."

That's exactly what the project is trying to prevent. "Our goal is to help villages decide what they can do to cut their energy costs and to help them go out and do it," says project coordinator Matt Zencey of RurAL CAP.

The staff calls the project "The Energy Team." The project is working with four villages on the southwest coast of Alaska — Nightmute, Chefnak, Newtok and Toksook Bay — and four villages in the

Interior — Shageluk, Allakaket, Nikolai and Chalkyitsik.

Work has already started on a number of projects that will mean lower energy bills for residents in these villages. Six of the villages will receive federal low-income weatherization this summer. Since almost all residents are low-income, most of the homes in each village will be served.

The weatherization will mean average fuel savings of 15% each year, according to RurAL CAP's study of a project done in Nome. But much more could be done. "Although weatherization will save lots of fuel and money, all of the homes need far more energy-saving work than the money under this program can pay for," said Conrad Zipperian, Energy Conservation Coordinator for RurAL CAP.

Allakaket and Chalkyitsik are waiting to hear about getting into the federal weatherization program. Meanwhile, the project is ready to do energy audits for every resident and to help each of them get a \$300 state grant for energy-saving things like insulation, storm windows, and caluking and weatherstripping.

The villagers have asked the State Division of Energy to let the Energy Team coordinate the program in their villages, but the Division hasn't done anything yet. "We hope the Division will let Chalkyitsik and

Allakaket get energy audits and the \$300 grants before the program expires at the end of June," said Zipperian.

Other energy-saving projects include:

- * helping residents apply for low-interest energy conservation loans
- * giving tips on energy conservation to people building new log homes in the Interior
- * helping Shageluk to plan a superinsulated community center.

Improving the villages' fuel management systems will mean lower energy costs too. The Energy Team is helping Allakaket and Chalkyitsik get barge service restored to reduce transportation costs for gasoline. For Shageluk, the Team is helping the village coordinate fuel orders with a new barge company that is offering lower prices.

"We're also helping villages make sure they have enough bulk storage for the fuel they need," said Fred Shelton, RurAL CAP's Fuel Management Coordinator. "Buying fuel in bulk (instead of drums) and getting a full year's supply by barge are the keys to keeping fuel prices low."

The project is also helping several villages look at wind machines and selling waste heat from their electric generators

as ways to lower their electricity costs.

Having Nunam Kitlutsisti and Tanana Chiefs Conference as part of the Team has made it easier to work successfully with the eight villages. These agencies selected the villages and did all the work to set up the Team's visits, making sure that it was a good time for the Team to go.

"They know the people and they know what's happening in the villages. Working with the villages' regional non-profit is like having a friend introduce you," said Zencey.

The regional non-profits also help the other Team staff and stay in touch after the first visit and follow up on the work that is started.

At Nunam Kitlutsisti, Mary Jim is organizing a meeting of the United Villages of Nelson Island, which includes all four of the project's villages in the Calista region. The meeting will be a chance to talk about ways the villages can work together to solve energy problems that all of them share.

Unlike most outside visitors to a village, the Energy Team staff spends a lot of time in the village, talking to as many residents as possible, not just village leaders.

"After the first day, people start asking us whether we're leaving on the next plane. They are surprised that we stay

all week," said Zencey.

"We go to every house in the village and try to find out what people think their energy problems are. We also find out how much energy they use and how much money they spend on it," Zencey said.

At the end of the week, the entire village is invited to a meeting with the Energy Team staff. Unlike many village meetings sponsored by outside visitors, village residents spend most of the time talking with each other about their energy problems and their ideas about them. Then staff from the Energy Team offer their ideas and residents pick the ones they think are best.

In the villages of the southwest coast, the meetings were conducted in Yu'pik, with bilingual group leaders writing down their group's ideas in English for the Energy Team.

The goal of the meeting is to let people know there are things that they and their village can do about their high energy costs. "After the meeting, almost all of the people who came say that they are willing to help their village work on energy problems," said Zencey.

That's when the hard work starts. The Energy Team staff gets information on things the village is interested in.