



# INTERTIE Newsletter



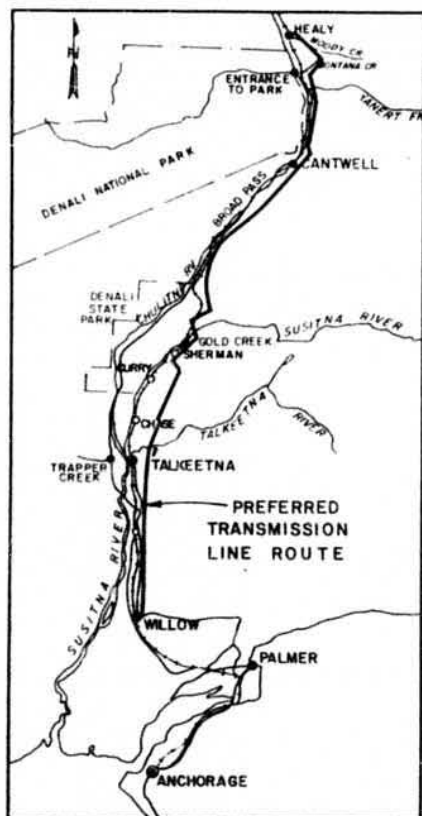
505  
319

March 1982

Alaska Power Authority Public Participation Office

This mailing of the Public Participation Office is the method of bringing people up-to-date on the status of the Willow to Healy transmission line. We will try to answer the most frequently asked questions that we hear in our office.

Eric P. Yould, Executive Director  
Nancy Blunck, Director of Public Participation



The general routing of the transmission line as approved by the Board of Directors in November 1981 is shown here.

## Alaska Power Authority Board of Directors Approves Routing of Intertie Transmission Line

The preferred route (which appears on this page) was approved by the Alaska Power Authority Board of Directors on November 19, 1981. The route is the product of economic, environmental, and feasibility studies, discussions with utilities and permitting agencies, and input from the public. It includes a portion which we dubbed the "near easterly" route that was suggested by meeting participants in June 1981 at the Susitna Valley High School. The route does not pass through the Chase, Curry, and Lane areas but does pass through the Sherman and Gold Creek areas. It avoids Denali National Park and all but a 1/2 mile corner of the Denali State Park. In the area of the park entrance into Denali National Park, the preferred route goes away from the highway (in order to preserve the views near the entrance) and goes into the Moody and Montana Creek drainages.

The Board also approved construction of the line at 345 Kv with initial operation at 138 Kv.

### Further Board Action

In addition to the general routing of the line, access was an important issue at the meeting. The Board took four actions regarding access.

First, Commonwealth Associates, the consultants who routed and designed the line for the Power Authority, recommended and the Board approved strict helicopter construction and maintenance

in the Moody/Montana area. This recommendation is in respect for the undisturbed nature of the area and the Dall sheep habitat. Helicopter construction would also be limited to seasons other than lambing time.

Second, Commonwealth had recommended going on the east side of Broad Pass. The Department of Natural Resources (DNR) prefers that the line go west of the highway in order to decrease visual impact. The Board directed the staff to make a good faith effort to accommodate DNR by working with them and the federal government to engineer a land swap. The western route suggested by DNR would require encroachment on a corner of Denali National Park.

Thirdly, a good faith effort to avoid Denali State Park was directed by the Board.

Fourth, the Board also accepted the Power Authority staff's recommendation to construct the top half of Super Link 3S and all of 6S in the helicopter-assisted mode (see discussion on construction modes) over Commonwealth's recommendation for conventional construction in that area. The staff's recommendation was mainly a result of public input relating to the lifestyles and environmental concerns in that area. The top half of 3S is north of the Talkeetna River; 6S runs east of the Susitna River and through the Gold Creek, Indian River, and Chulitna Pass areas.



Alaska Power Authority Board members, staff, resource persons, and members of the public are shown during the November 1981 Board meeting.

# Conceptual Access Plan

Great concern was voiced by both the public and the permitting agencies about construction access, in large part because not much was known about what the options were. Commonwealth developed and presented a conceptual plan to show how access would most likely occur. This plan was presented to the Board of Directors in November 1981. This plan depends heavily on existing roads, trails, and previously disturbed areas (for example, old gravel pits could be marshalling yards). The concept of operations that goes with this access is described below.

## Methods of Construction

The following chart shows the selected method of construction for each Super Link. The Super Links or increments are shown on the map on page 3.

Super Link Number	Preferred Mode
1	C
bottom half of 3*	C
top half of 3*	HA
6	HA
7	C
9	C
12	C
13	C
15	H
16	HA

\*The dividing line is the Talkeetna River.

### Explanation of Construction Modes:

- C = Conventional land construction methods
- HA = Helicopter Assisted  
Helicopter transport of labor, equipment, and materials with helicopter assistance to all operations. The notable exceptions to the helicopter assistance will be the operations involving reels of cable and the equipment called the tensioners and pullers, which will be brought overland to the work sites.
- H = Helicopter Only  
Helicopters will be used for construction and ultimately for maintenance. Special equipment will be fabricated so that the reels of cable, the tensioners, and the pullers can be lifted by helicopter.

It is expected that the final access plan used will be very similar to the one described here. However, there can and probably will be variations. Every contractor goes about his work a little differently and in order not to create more problems than what are solved, the final access plan must also consider the contractor's needs. The final access plan will be developed jointly by the permitting agencies, the contractor, and the Alaska Power Authority. This final plan will include the location of marshalling yards. Final decisions will not be reached until 1983. Public concerns will be represented by both the permitting agencies and the Power Authority. There is every reason to believe that the final plan will continue to rely heavily on existing developed and platted access.

## Marshalling Yards

The conceptual plan calls for selected marshalling yards along the Parks Highway and the Alaska Railroad. Marshalling yards are storage places for materials and equipment. The materials and equipment will be delivered by truck or railroad to the marshalling yards and then transported to the line right-of-way where installation occurs.

The location, size and distance between marshalling yards are determined by the nearness to established transportation facilities, site availability, and limitations of access. The plan shown here provides

for fifteen marshalling yards along the entire length of 170 miles. Materials can be loaded on trucks or rail cars and directly shipped to a selected yard with a minimum of handling, resulting in minimal damage and loss.

## Access To The Right-Of-Way

Access to the right-of-way from the railroad or highway and marshalling yards will be needed on a daily basis during construction, delivery of materials, installation of foundations, assembly and erection of structures, and stringing of conductor and shield wires.

## Travel Along The Right-Of-Way

The machines and equipment required for foundations, structures, and wire stringing activities are brought initially overland onto the right-of-way from the marshalling yards by way of a road or trail and then stay on the right-of-way until the job is completed. Where natural obstacles to continuous construction (such as rivers, canyons, or steep slopes) prevent this, the contractor will have to exit from the right-of-way and return to it further along the route.

## Environmental Considerations

Environmental considerations are being incorporated in the final plan. Existing and planned roads and trails will be used to the maximum extent possible. Introduction of access into areas where none previously existed will be planned to minimize stream crossings, extensive switchbacks on steep topography and heavy clearing of vegetation. The location of residences and private property will be respected as much as possible as more detailed studies are initiated to determine the final location of access into the right-of-way.

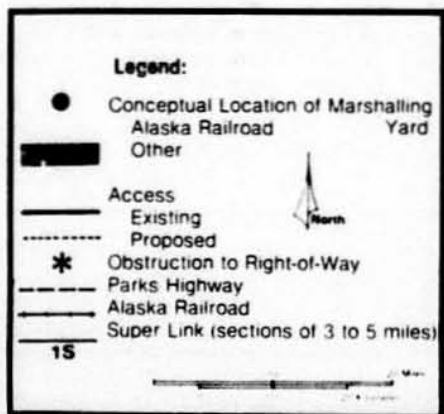
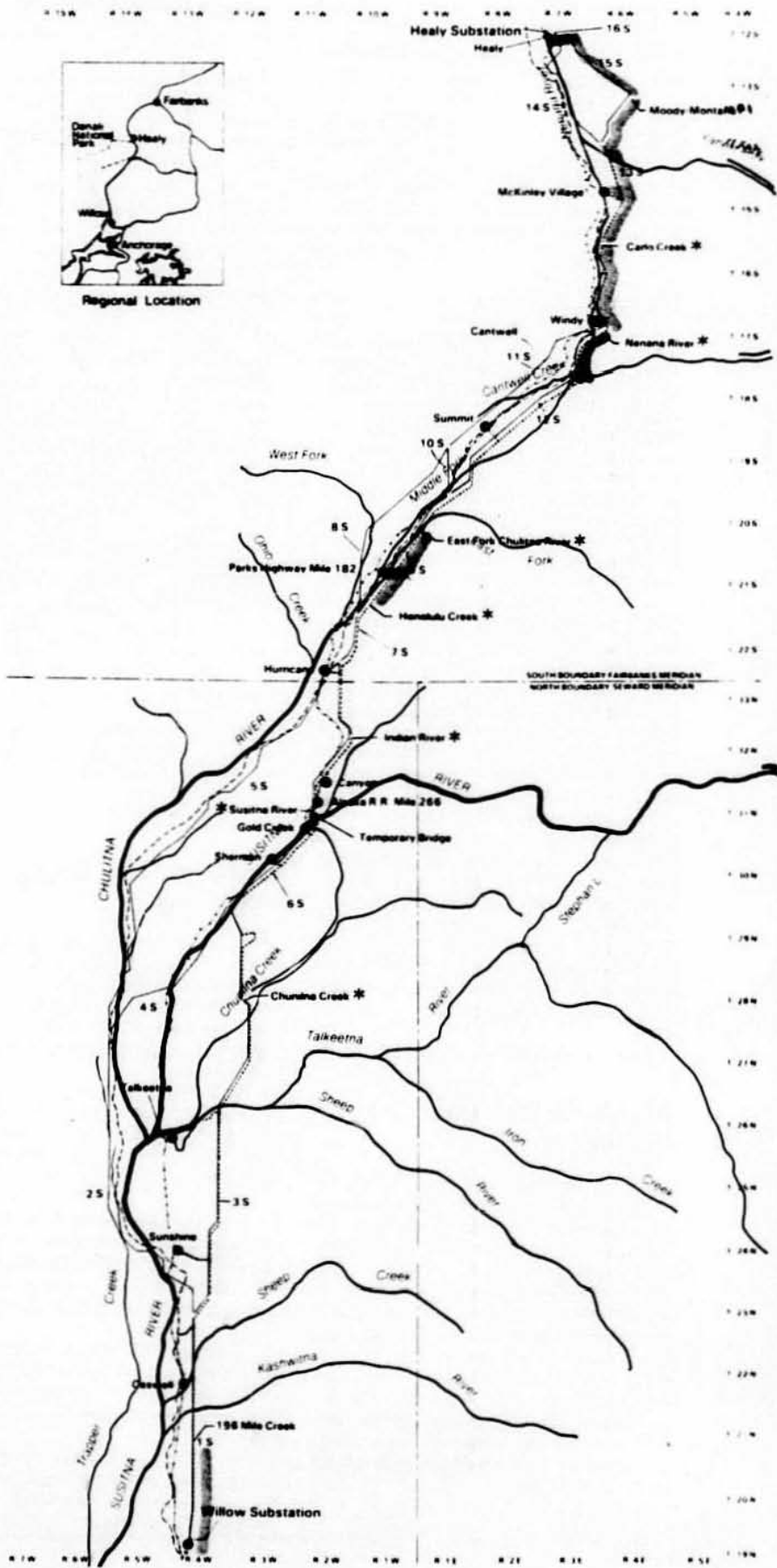
## Conceptual Plan Becomes A Working Plan

The conceptual plan will be modified in accordance with permitting agency stipulations and will be finalized prior to the start of construction. As parts of the plan become finalized, they will be discussed in future newsletters.

A marshalling yard, or staging area is shown here. Exact locations and sizes of marshalling yards on this project will be determined jointly by the resource agencies, contractors, and the Power Authority during 1982 and early 1983.



### Conceptual Access Map



## What is the background of the Intertie?

The possibility of interconnecting Fairbanks and Anchorage has been discussed for a number of years and culminated in a May 1981 feasibility report, prepared by Commonwealth Associates. In this report the two potential benefits of an intertie were discussed.

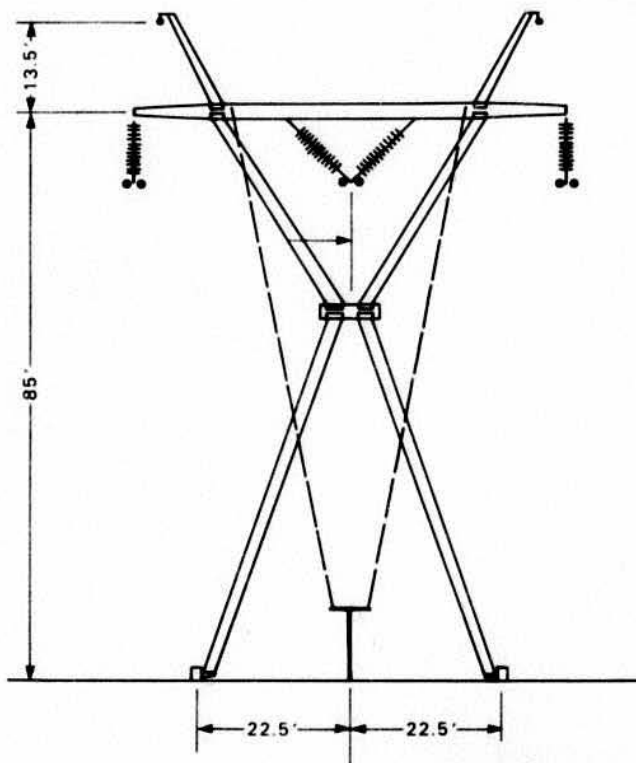
### The Potential Benefits

The first benefit is called **economy interchange**. The merit of economy interchange hinges upon the fact that the oil burned in Fairbanks is, and promises to be, substantially more costly than the natural gas burned in Anchorage. Thus, if energy provided by lower cost gas could be transported to Fairbanks to replace energy produced there with oil, there would be a cost reduction overall. The estimated savings is \$160 million for the period 1984 to 1993.

The second benefit is called **reserve sharing**. The demand for electricity varies throughout the year, depending on the time of day, the weather, etc. A utility must have a generating capacity well in excess of the peak (heaviest) demand in order to cope with equipment failures and unanticipated loads such as those caused by unseasonably cold weather. This excess is defined as the reserve. It is estimated by sharing reserves Anchorage can reduce its need for new generating capacity by 70 MW (by 1993) and Fairbanks can reduce its need by 55 MW, bringing the total reduction to 125 MW. This will save an additional \$14 million in the 1984-1993 time frame. Thus the total saving in the 1983-1994 period is roughly \$174 million in 1982 dollars.

## What's in the future for the Intertie?

A team is currently in the field (February and March) to determine more precisely the location of a 400 foot right-of-way. Affected residents were contacted and their input is being solicited. Foundation tests will be taken through April. Surveyors will be working along the right-of-way most of the summer. Bid packages for long lead time materials will be issued by mid-summer 1982. Right-of-way clearing contracts (sufficient for the Intertie only) will be issued in mid-1982 and construction contracts will be issued in early 1983. Construction is planned to be completed by the fall of 1984.



*Design recommendations for the intertie include this x-tower to be constructed of Corten (naturally rusting steel.) The conductors (wires) will be a nonspecular material that will reduce light reflection.*

## Geotechnical Explorations Beginning

During March and April 1982, the geophysical contractor will be conducting geotechnical explorations. They plan to make foundation borings at up to 73 locations. Samples will be analyzed to see if the ground conditions are adequate for foundations.

Presently the plan calls for overland drilling at 31 locations to be followed by helicopter surveying at the other 42 locations.

Since all samples will be analyzed before appropriate foundations can be designed, residents in the areas should not assume a foundation will be made at the places they see machines or helicopters.

In addition to these explorations, geologists will be surveying the entire route during this period to gather geological information.

There will be no employment opportunities attendant to this exploration since the contractor will have his own drill equipment and crews.

## Will I be able to get a job on the Intertie?

The Public Participation Office has been getting questions about job opportunities on the intertie. While opportunities are not imminent, it appears that jobs will be available in the future, not directly from the Power Authority, however, but from the clearing and construction companies. Right-of-way clearing contracts will be issued later this summer, and construction contracts in early 1983. The consultants have been instructed to write the contract documents so as to provide the maximum participation opportunity possible for Alaska firms and Alaska residents. Many of the jobs will require specific skills. As plans progress and more information becomes available, it will appear in future newsletters.





November 1981

**Dr. Harry A. Kornberg**, Bonneville Power Administration, Vancouver, Washington, on loan from the Electrical Power Research Institute.



November 1981

**Dr. S.M. Michaelson**, Professor of Radiation Biology and Biophysics and Associate Professor of Medicine and of Laboratory Animal Medicine in the School of Medicine and Dentistry, University of Rochester.

## Biological Effects Research Reviewed

In response to public concerns about possible harmful biological effects, the Board heard from Dr. S. M. Michaelson and Dr. Harry Kornberg. They reviewed research to date on the biological effects of high voltage transmission lines. Dr. Michaelson is Professor of Radiation Biology and Biophysics and Associate Professor of Medicine and of Laboratory Animal Medicine in the School of Medicine and Dentistry, at the University of Rochester. Dr. Kornberg is on loan from the Electric Power Research Institute to the Bonneville Power Administration in Vancouver, Washington. Both men have extensive knowledge and experience in this field and concluded there are no definite data confirming harmful biological effects associated with a transmission line the size of the Willow to Healy Intertie (345 kv).

## Public Participation Process Now Emphasizes One-on-One Involvement

The emphasis of public involvement in the intertie project has now changed from communications with communities to one-on-one involvement, in order to involve the people who are more directly affected by the line. Dialogue with local property owners near the transmission route began in early February 1982 and continues with the following activities scheduled.

### Currently Under Way

In February and March 1982, small individual meetings are being held with property owners near the proposed route. Contacts for these meetings are being made directly by Land Field Services.

Most contact is being made directly with the property owners listed on legal records. Some contact is also being made through bush radio and the CB "grapevine." The locations of these meetings are Fairbanks, Cantwell, Talkeetna, Willow, and possibly Anchorage, so that individual property owners can go to the meeting closest to their current place of residence.

### Later in the Spring

After this step at line refinement, property owners will again be contacted by a Land Field Services representative seeking permission to do survey work. This will be another opportunity for individual owners near the route to provide advice on the alignment by giving direct input to the representative.

If land is in fact affected by the right-of-way, an independent appraiser (not yet selected) will appraise the impact. Some time thereafter, Land Field Services, using the survey information and the independent appraisal, will contact the landowner to negotiate the actual compensation.

## Who is Land Field Services?

Land Field Services (LFS) is a contractor involved in the fine-tuning of the intertie route. It is an Alaskan corporation with offices in Fairbanks and Anchorage. It is a multi-disciplinary land consulting firm, specializing in land management, project management, negotiations, title service, real property appraisal, route selection, acquisition of rights-of-way and corollary permits. LFS will participate with Commonwealth Associates and Dryden and LaRue, an Anchorage engineering firm, in fine tuning the transmission line routing.

## What Questions Would You Like Answered In Future Newsletters?

We will try our best to answer your questions in future newsletters. Write your question here and send it to the Public Participation Office, Alaska Power Authority, 334 West Fifth Avenue, Second Floor, Anchorage, Alaska 99501.

---



---



---



---



---



---



---

# Summary of Public Participation During 1981

At the November 1981 Board meeting of the Alaska Power Authority, Nancy Blunck, Director of Public Participation, summarized the activities of the office and the input from the public in 1981 relative to the intertie. This summary is included below.

The three major objectives of the Public Participation Office (PPO) were to: 1) inform the public; 2) record their responses; and 3) incorporate public preferences into the decisions of a route.

Informing the public was accomplished by mailings, meetings, letters, and distributing maps.

**Mailings** A total of five mailings went out from January 1981 through December 1981. They can be broken down in the following way:

January - 450 people  
March - 1700 people\*  
May - 1700 people\*  
June - 1700 people\*  
August - 1700 people\*

\*Included all boxholders in Willow, Talkeetna, Trapper Creek, Cantwell, McKinley Park and Healy.

**Meetings** A total of 15 public meetings were held in the areas of Fairbanks, McKinley Park, Cantwell, Talkeetna/Trapper Creek, and Anchorage. Over 650 people attended these meetings which were held January 1981 through November 1981, with many people attending more than one meeting.

**Maps** Over 200 maps were distributed throughout the process to interested individuals at meetings and by mail. Some persons stopped by the Power Authority office to get the maps.

**Letters** Forty-six letters were directly received in the Public Participation Office. Eighty-five percent were from smaller communities (other than Anchorage and Fairbanks). An additional forty-eight letters were received in the Governor's office and referred to the Power Authority. Whenever appropriate, responses were sent.

While each community had concerns specific to its area, some concerns were heard throughout the railbelt: 1) the visual impact of the line; 2) potential ATV use of any new access roads; and 3) possible biological effects of the high voltage line.

The transmission line route that was approved by the Board of Directors reflects approximately 90% of the public preferences heard during 1981.

The emphasis of public involvement has now changed from communications with large groups of people (communities) to a one-on-one involvement. During February and March 1982, property owners and affected persons are being contacted by Land Field Services, the contractor which is involved in the fine tuning of the routing of the line.



The process began in January 1981.....  
A participant marks his map during the Talkeetna meeting.



**Alaska Power Authority  
Public Participation Office**  
334 W. 5th Avenue  
Anchorage, Alaska 99501

**BULK RATE  
U.S. POSTAGE PAID  
PERMIT NO. 272  
ANCH. AK. 99502**

Mr. Bill Wilson  
AIDC-University of Ala  
2211 Providence Drive  
Anchorage, Alaska 99504

Forward to  
207 A. St.  
Anch. AK. 99501

**Anchorage - Fairbanks Transmission Line**