

SOUTHEAST ALASKA POWER AGENCY



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Delivery Via Email to akroadlessrule@fs.fed.us

Alaska Roadless Rule
USDA Forest Service, Alaska Region
Ecosystem Planning and Budget Staff
Post Office Box 21628
Juneau, Alaska 99802-1628

**Southeast Alaska Power Agency
Comments in Support of Alternative 6
Alaska State-Specific Roadless Rule**

Introduction:

The Southeast Alaska Power Agency (SEAPA) is a Joint Action Agency, a public corporation formed and existing under the Alaska Public Utilities Act (ASUAPUA), 08.45.300-.320. SEAPA owns two hydroelectric projects in Southeast Alaska (Gwaii Lanang and the Tye Lake Hydroelectric Facilities) and associated transmission facilities that provide economical, renewable, non-carbon-based electric power to SEAPA's three member public utilities in Wrangell, Petersburg, and Ketchikan. SEAPA has a vital interest in the management of the Tongass because application of the Roadless Rule to the Tongass adversely affects its ability to generate affordable renewable electric power in rural Southeast Alaska as an alternative to diesel and other fossil fuels. With rare exceptions, communities in Southeast Alaska are not connected by road or to the North American electrical grid and rely on either renewable hydroelectric power or non-renewable expensive polluting diesel generation for their electricity needs.

The purpose of this communication is to request that the Tongass National Forest (TNF) be completely exempt from the Roadless Rule and to voice SEAPA's support of the USDA's preferred Alternative 6 exempting the TNF from the 2001 Roadless Rule, which is fully responsive to the State of Alaska's petition. The long and storied history of the State of Alaska's challenges to the Roadless Rule (Rule), which have been supported by SEAPA, needs no reiteration. The Alaska Power Association has also advocated for an exemption for many years.

The undersigned was appointed by Governor Walker to the Alaska State-specific Roadless Rule Citizen's Advisory Committee (CAC) which represents a diversity of perspectives, including the energy sector, established to provide information to the State in the State's role as a cooperating agency in the NEPA process. The CAC developed language to implement new exceptions for the Alaska-specific Roadless Rule that it recommended be included in each alternative (2 - 5) set out in the DEIS, other than the No Action alternative. None of the CAC's recommended language

was included as an exception in Alternatives 2 – 5 of the Alaska-specific Roadless Rule. Because attaining the social and economic benefits of the CAC's proposed new exceptions for the Alaska-specific Roadless Rule is the reason the State of Alaska, its Congressional delegation, and the Coalition sought the Alaska-specific Roadless Rule and because Alternative 6 (total exemption) is the only alternative that would result in implementation of the CAC's recommendations, I urge you and the USDA to adopt Alternative 6 – the Total Exemption Alternative as the Final Rule. Some examples of the language in the CAC's proposed new exceptions to be added to 36 C.F.R. § 294.12 and § 294.13 included:

- (1) While “reasonable” access is allowed for mining in IRAs, mining explorers often need road access to get heavy equipment from tidewater to a Project site or to otherwise proceed with economically exploring and developing a mine or a hydro facility. Accordingly, road access for mining exploration and development and for renewable energy projects within IRAs should be presumptively authorized in the same way as if the mining or renewable energy project were in a non-IRA area.
- (2) Road access to renewable energy projects in IRAs (including geothermal to which road access is currently prohibited in IRAs) should be presumptively authorized in the same way as if the mining or renewable energy project were in a non-IRA area. Renewable energy could then replace diesel power in rural Southeast communities or be available to power mining exploration and/or mine development.
- (3) The Transportation and Utility System Land Use Designation that was eliminated in the 2016 Tongass Transition Plan should be restored to allow implementation of the State's Southeast Transportation Plan.
- (4) Road access between communities should be authorized notwithstanding the existence of IRAs between them.
- (5) Cutting and removal of trees incidental to mining and renewable energy projects should be authorized in IRAs under the Alaska-specific Roadless Rule in the same way it is authorized in a non-IRA area.

Rather than the CAC's language being included in any alternative, each road exception is instead preceded by the words “if the Responsible Official determines that ... a road is needed,” which is what is in the No Action alternative so the Forest Service determines whether a road is needed without any criteria needed for doing so. The relief the energy and other sectors of the State seek is only provided in Alternative 6. If Alternative 6 is not selected, then there will be no relief resulting from the State's petition and many challenges to the Rule which will still leave a void in attaining the social and economic benefits necessary for the Alaskans who live in Southeast Alaska. Efforts to align with multiple-use management as the organizing principle of National Forests and preservation as the organizing principle of National Parks are balanced and achieved only when properly implemented.

Comments brought forward in the remaining paragraphs of this communication highlight the Roadless Rule's impact on hydropower development and the effect the Rule's regulatory requirements have had on Southeast Alaska's electric consumers and electric utilities.

Significant Issues for Analysis:

Inventoried roadless areas covered by the 2001 Roadless Rule comprise 9.2 million acres (55 percent) of the Tongass National Forest (TNF). The TNF is the largest of the 154 national forests and comprises 78% of the land base in Southeast Alaska. Of its approximately 16.7 million acres, about 10 million acres are forested. There are 5.7 million acres within the TNF that are already Congressionally designated roadless wilderness areas and national monuments, which accounts for 34% of the Tongass. The Forest Service has wide discretion in deciding the proper mix of uses within any area of National Forest System (NFS) lands and must manage the NFS under the Organic Act, the MUSYA, and NFMA which authorize them to manage NFS lands and designate those lands for multiple uses. In exercising its managerial authority under these statutes, the USFS must also comply with the Wilderness Act and NEPA. Forest Service officials also bear the responsibility of considering national interests in their management of the Forest System, including inventoried roadless areas. The Rule however recognizes that some communities, such as those in Southeast Alaska, bear a disproportionate share of the burden of the impacts from the Rule.¹

There are 34 communities located in Southeast Alaska. Expensive and polluting diesel is still the primary power source for 14 of them and hydro is the primary power source for the remaining 20, with diesel as the secondary source. The cost impact of the Rule on hydropower development must be mitigated or communities already economically burdened will continue to burn expensive and polluting diesel to generate power because they cannot afford to develop new energy resources. Communities with hydro facilities as the primary power source may not be able to economically meet future load growth with renewable energy if access is inhibited. The Rule only allows for roads to hydro sites and transmission infrastructure permitted as of January 12, 2001. This precludes hydro development and transmission infrastructure where it is needed most in Southeast Alaska – in the rural areas that are paying up to \$0.66/kWh².

The potential energy production contributions of NFS lands has not been thoroughly assessed in Alaska. In 2005, the USDA National Renewable Energy Laboratory conducted a solar and wind energy assessment on all National Forest and Grassland units in the United States, except for Alaska. Alaska was excluded because of the lack of transmission system data in GIS format, which at that time was considered a critical element used for screening high-potential areas for solar and wind energy development. The USDA assessment was updated in 2013 when an analysis of renewable energy potential on NFS lands was expanded to include the potential for biomass, geothermal, solar, and wind energy involving NFS lands. Once again, the geographic scope of that report included all NFS lands in the US except for Alaska because analysis for Alaska included only wind energy due to insufficient quality and detail of available biomass, geothermal, and solar energy resource data. A thorough assessment of Alaska's potential energy production contributions on its NFS lands while accounting for environmental stewardship, sustainability, and multiple-use functions should be a consideration in the Roadless Rule issues under analysis as the Roadless Rule does not adequately address other forms of renewal energy outside of hydropower and wind.

¹ 66 Fed. Reg. at 3267 (Jan. 12, 2001)

² Alaska Energy Authority, Power Cost Equalization Program, Statistical Data by Community (Issued Feb. 2017)

The following are specific cost impacts resulting from the Roadless Rule on development of hydro and other energy resources and ongoing operations and maintenance of existing facilities:

Data Collection to Support Planning and Engineering: From initial siting studies through final design, extensive data is required on hydropower sites to support project licensing and development. This data includes topographic surveys, geologic and geophysics mapping, geotechnical site investigations, stream gaging, general engineering site review, and investigations. In Roadless areas, access is typically provided through marine transportation to bring support equipment and supplies to the project site. Helicopters are then required to lift the equipment, supplies, and manpower to collect specific data. This is particularly true for geotechnical explorations where drilling equipment is required. When collecting multiple geotechnical borings, the limited lifting capacity of the helicopter, coupled with essentially no site development to support the equipment, drives the cost up considerably. Similar cost increases are associated with developing accurate topographic maps in heavily vegetated areas as well as establishing stream gages. The cost increases can range from 50% to 100% of the typical cost associated with sites fully accessible by roads.

Environmental studies: A typical hydropower project requires extensive field studies to collect data associated with aquatic, wildlife, water quality, water resources, cultural, and terrestrial resources associated with the site. In the absence of roads, access to these sites requires helicopter transport and time-intensive hiking by field staff. Remote sites also require the construction, operation, and maintenance of onsite man camps to support field crews. Necessary supplies are subsequently brought in by water, float plane, or helicopter. These conditions often result in study cost increases of 50% to 100% when these sites are not accessible by road.

Construction: Hydro projects are major construction projects that require heavy machinery and equipment. Construction costs associated with hydropower sites in Roadless v. road accessible areas are significantly impacted starting with initial mobilization of the project through the final startup and commissioning period. Typical incremental cost increases include:

- 100% or more for mobilization costs required to transport equipment to the site. Mobilization typically requires marine transportation due to the size of the equipment. Equipment also tends to be on site longer, even when not in use, due to the high cost of transportation to remobilize equipment to the site.
- 50% or more for construction access development starting with construction of a marine dock used to unload equipment, materials, and manpower to support the construction, onsite living facilities, fuel delivery and associated supplies.
- 25% or more for ongoing delivery of materials and supplies necessary to support a man camp and field construction.
- 25% to 40% in general construction costs.

- 25% to 40% for construction oversight due to higher transportation costs for quality control testing staff and equipment, or for housing staff for a longer duration onsite.
- 15% to 25% for weather delays that impact the ability to deliver critical equipment and materials to the site. Transportation by road provides greater flexibility in scheduling deliveries and accommodating poor weather conditions that impact marine or air transportation.

Transmission Line Costs: The cost of permitting, engineering, and construction of overhead transmission lines required to connect hydropower and other renewable energy projects to load centers is similarly impacted by the Roadless Rule. Utilizing information compiled in 2016 for the Kake-to-Petersburg Intertie (KPI), 69kV overhead line construction along roads is \$611,000/mi and 69kV overhead line construction without roads using helicopters, constructing trails between poles and building helicopter pads at pole sites as needed is \$1,004,000/mi. The KPI experienced significant permitting delays associated with methods and means of accessing Inventoried Roadless areas, which had a severe impact on the construction cost escalation. Consequently, the project is on hold indefinitely and Kake is currently still 100% dependent on diesel generation to serve their electrical loads.

For renewable energy infrastructure projects that are almost entirely encompassed within Roadless areas, costs of construction are overly burdensome and the location for the most cost-effective projects are often dictated by nature. Use of helicopters to construct SEAPA's 138kV Swan-Tyee Intertie (STI) resulted in a construction cost of \$2 million dollars a mile. The STI is 57 miles long and the total construction cost including permitting, design, etc. was approximately \$110 million dollars. Many of the transmission lines and corridors for the STI project were not allowed to be built along the most favorable terrain for ease of maintenance or constructability. The Agency dictated right-of-ways were in steep, out-of-the-way areas subject to land and snow slides and costly helicopter-only access.

Another important, often overlooked, factor is the long-term financial impact of operating and maintaining a transmission line that is limited to helicopter access. Rights of way (ROW) for such a line must be maintained and brushed continually. The structures must be inspected on a rotating annual basis. With road access this work can be cost effectively completed by a crew in a truck. Without road access, this work must be helicopter supported. Local hourly costs for helicopters are \$1,090.50 for a small MDH 500D, \$2,045.25 for an A-Star B2, and \$5,872.50 for a Bell 214 B1 required for larger projects.

In addition, transmission lines that do not have road access must have helicopter pads near the structures. To date, SEAPA has incurred costs of over \$3 million dollars on helipads. These helipads must also be maintained and brushed every few years, which also must be done by helicopter.

In the *Organized Village of Kake v. USDA*, No. 1:09-cv-00023 (March 4, 2011) (upheld on appeal) the District Court of Alaska decided to allow roads to be built through an Alaska forest it had previously ruled should be roadless. The final judgment made a special provision for certain projects and activities including road construction for listed projects and hydroelectric development, and the Forest Service regards these projects and activities identified in the final

judgment as exempt from the prohibitions of the Roadless Rule under the terms of the final judgment. The issue is that the Rule itself provided no such exemption. The Rule prohibits tree cutting and road construction or reconstruction in inventoried roadless areas. 36 C.F.R. § 294.12(a). The seven exceptions in subsection (b) of 36 C.F.R. § 294.12 allow a road:

- in the case of an imminent flood, fire, or other catastrophic event that, without intervention, would cause the loss of life or property;
- to conduct a response action under CERCLA;
- because it is needed pursuant to a reserved or outstanding rights, or as provided for by statute or treaty;
- because realignment is needed to prevent irreparable resource damage;
- because road reconstruction is needed for safety on a hazardous road;
- The Secretary determines that a Title 23, Federal Aid Highway project is in the public interest and "no other reasonable and prudent alternative exists"; and,
- because "it is needed in conjunction with the continuation, extension, or renewal of a mineral lease on lands that are under lease by the Secretary of the Interior as of January 12, 2001 or for a new lease issued immediately upon expiration of an existing lease".

There is a short discussion in the comment/response portion of the Rule that states the following regarding the ability to construct roads in IRAs to access hydropower facilities:

Some respondents were concerned about the impact of the rule in special uses and requested clarification regarding the ability to construct or maintain roads in inventoried roadless areas to access electric power or telephone lines, pipelines, hydropower facilities, and reservoirs.

Existing authorized uses would be allowed to maintain and operate within the parameters of their current authorization, **including any provisions regarding access.**

In the USDA Forest Service Alaska Region Reviewing Officer's³ Response to Eligible Objections to the TNF Land and Resource Management Plan Amendment, the Reviewing Officer responded that power and transmission lines and hydropower development activities are not prohibited and addressed whether road construction for hydroelectric development may be authorized. The officer states " ... if FERC decides that a road is necessary for facility development, the Forest Service cannot impose a 4(e) Condition prohibiting the road. The Roadless Rule at 36 CFR § 294.12(b)(3) provides that a road may be constructed or reconstructed in an inventoried roadless area if "[a] road is needed pursuant to reserved or outstanding rights, or as provided by statute or treaty."

Because there is no mention of **new utilities**, or any mention of **new hydropower** in either of these references and because it is subject to FERC jurisdiction, the language is still ambiguous as to whether the 2001 Roadless Rule allows new roads for such development. New in this case means "not in existence on January 12, 2001," the date the Rule was promulgated. There are different types of renewable energy projects that are not subject to FERC jurisdiction so 36 CFR

³ TNF Land and Resource Management Plan Amendment Review Officer (Beth G. Pendleton) Response to Eligible Objections, November 28, 2016, USDA Forest Service Alaska Region, p. 116

§ 294.12(b)(3) should be broadened to include non-FERC jurisdictional renewable energy projects.

Table 1 attached to the Final Rule, summarizes the costs and benefits of the Final Rule, and describes the impact of the Final Rule on “Special Use authorizations (such as communications sites, electric transmission lines, pipelines)” as follows: “Current use and occupancies not affected, future developments requiring roads excluded in inventoried roadless areas unless one of the exceptions applies.”⁴

It is therefore clear that the Forest Service simply failed to address the contradiction between Public Law 106-511, Title VI, and the Roadless Rule. Passage of this authorization was a change in conditions since publication of the FEIS. This ambiguity should be addressed in the Alaska-specific Rule.

Currently in the Final Rule, there are seven exceptions⁵ in subsection (b) of 36 C.F.R. § 294.12 which a road may be constructed or reconstructed in an inventoried roadless area (notwithstanding the prohibition in paragraph (a) of § 294.12) if the Responsible Official determines that one of those seven exceptions exists.

A new exception for Alaska-specific rulemaking should be added to those exceptions in 36 C.F.R. § 294.12(b) as follows:

A road is needed to access existing and/or future renewable energy projects and their transmission infrastructure. Renewable energy is defined as energy that is collected from renewable resources, which are naturally replenished on a human timescale, such as sunlight, wind, rain, tides, waves, geothermal heat, and biomass, or other forms of energy.

Please consider:

- A hydro power project cannot be constructed with helicopters alone. Hydro projects are major construction projects that require heavy machinery and equipment. For example, the generators at the Tyee Lake hydro facility weigh 30 tons. Machinery and equipment of this size require a road for access. Because the 2001 Roadless Rule prohibits road construction as well as tree cutting, it will be very difficult and expensive, and perhaps impossible, to build new hydro projects in IRAs.
- Development of leasable minerals, which includes geothermal power, is specifically precluded for sites not in existence as of January 12, 2001. This means that the geothermal resources similar to those that were attempted to develop in Upper Tenakee Inlet to supply renewable power to Hoonah and Pelican are precluded by the Roadless Rule.
- There is no exception for wind power or other renewable energy projects – trees cannot be cut in roadless areas to provide sites for wind turbines and required roads cannot be constructed to move large cranes and equipment. This essentially eliminates the possibility of developing wind and other potential resources.

⁴ 66 Fed. Reg. *supra*, at page 3270

⁵ 66 Fed. Reg. *supra*, at page 3272

- The investment required to electrically interconnect potential renewable assets with population centers is the single largest hurdle to migrating diesel dependent communities to alternative energy resources. The primary controllable means for reducing transmission infrastructure installation and long-term operations and maintenance costs is to have road access.

Conclusion:

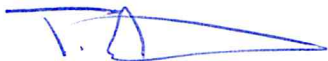
As a one hundred percent renewable energy provider, SEAPA works every day to reduce the use of diesel fuel. The TNF in Southeast Alaska is the largest national forest in the United States at 16.7 million acres. Thirty-four percent or 5.7 million acres of the TNF is Congressionally preserved as roadless through classifications of monuments and wilderness. The land use designations (LUDs) defined in the Tongass Forest Plan provide additional protections for much of the remaining TNF and were derived through a robust multi-year public process. The Roadless Rule is unnecessary with all of these pre-existing protections already in place and is in conflict with the overarching authority of the USFS to manage lands for multi-use.

Limits on access to the TNF due to the continued application of the Roadless Rule impedes the ability of Southeast communities to access their existing generation and transmission facilities for core maintenance and hinders key work necessary to plan and develop future renewable energy resources

The Roadless Rule should not apply to the TNF. Because Alternative 6 is the only vehicle that implements the CAC's recommendations, SEAPA supports the State of Alaska and Alaska's Congressional Delegation in urging the USDA to again select the Total Exemption Alternative as the Alaska-specific Roadless Rule.

Thank you for your consideration of these comments. If you have any questions, please do not hesitate to contact me

Respectfully,

A handwritten signature in blue ink, appearing to read 'T. Acteson', with a long horizontal line extending to the right.

Trey Acteson, Chief Executive Officer
Southeast Alaska Power Agency