NREL
NATIONAL RENEWABLE ENERGY LABORATORY

NREL is a national laboratory of the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, operated by the Alliance for Sustainable Energy, LLC.

RAPID toolkit

Regulatory and Permitting Information Desktop (RAPID) Toolkit

For RAPID access to regulatory and permitting information

Visit the RAPID Toolkit Website: http://en.openei.org/wiki/RAPID

Katherine R. Young and Aaron Levine

Permitting Atlas

The RAPID Toolkit provides overviews of regulatory and permitting requirements at the federal and state levels, and allows users to compare requirements among states and technologies. For example, a developer can look up land access requirements for a particular state, or compare requirements across multiple states.

Three Ways to Navigate

Project Type
- Geothermal
- Bulk Transmission
- Solar

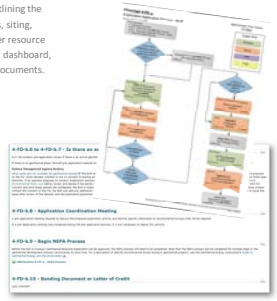
Topic
- Land Use Planning
- Siting
- Land Access
- Exploration
- Well Field
- General Construction
- Power Plant
- Grid Connection
- Environment
- Water Access/Rights
- Plant Decommissioning

Jurisdiction

Partial Example: Project Type: *Geothermal*
Topic: *Water Access/Rights*
Jurisdiction: *Colorado*

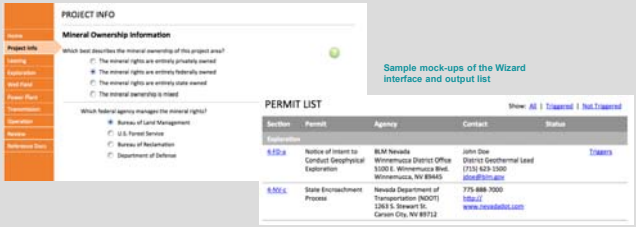
Regulatory Roadmap

The Regulatory Roadmap is a set of flowcharts providing detailed information outlining the requirements for developing energy projects, including topics such as land access, siting, exploration, drilling, plant construction and operation, grid interconnection, water resource acquisition, and relevant environmental considerations. The Roadmap includes a dashboard, flowcharts and supporting materials, including links to relevant regulations and documents.



Permitting Wizard

The Permitting Wizard is currently under development with a planned Beta coming soon! The Wizard leads users through a series of questions about the project and its activities to determine which permits will be needed for the project. The output is a list of permits with a link to the roadmap, contact information, and information about the user-input answers that triggered the permit.



Sample mock-ups of the Wizard interface and output list

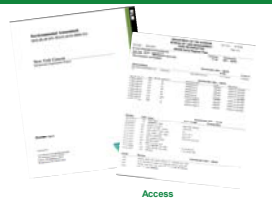
Resource Library

The Resource Library assembles links to permits, processes, guidance, manuals, examples, regulations, rules, contacts, and other regulatory and permitting documents that are publicly available on other websites. Users can search the library to find related documents, or add to the library by providing links to additional documents.

NEPA Database

The NEPA Database is a collection of documents and metadata for previously conducted NEPA analyses that can be used to inform future NEPA analyses. The database catalogs proposed activities, timelines, applications, reports and decision documents, impacted resources, and proposed and imposed mitigations for these resources.

Project Type:	Geothermal
Environmental Analysis Type:	EA
Applicant:	Terra-GenPower
Geothermal Area:	New York Canyon
Project Location:	Lovelock, NV
Project Phase:	Exploration
Activities:	Exploration Drilling, We
Application Document Type:	POO, ROW
Application Date:	11/23/2009
Revised Application Date:	11/23/2009
Scoping Initiated Date:	10/26/2009
Preliminary EA-EIS Date:	4/1/2010
Decision Document Date:	10/15/2010
Etc.	



Access NEPA-related documents

Project metadata are catalogued in system for use in querying and sorting.

Review list of potential resource impacts and proposed/imposed mitigation

Best Practices

Best Practices provides a set of analyses outlining best practices, examples, and templates for selected topics, such as developing memorandums of understanding (MOUs) among agencies and developing effective public involvement strategies.

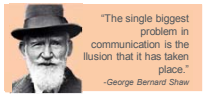
In the review of regulatory and permitting practices throughout the states, the RAPID team has identified several best practices that stakeholders find effective in efficiently permitting their projects. We have developed descriptions of these best practices and provided case studies, templates, and how-tos for incorporating these best practices into your development projects.

We are continuing to add new best practices to this section. If you have suggestions for best practices to be included, please feel free to add one or contact us with your ideas.

Example Best Practice: Coordinating Permit Offices

BENEFITS

- Enhance transparency and understanding by all stakeholders involved in the permitting process.
- Facilitate communication among agencies.
- Save agencies time in explaining permitting process to industry and to their own personnel.
- Help in training new staff and in documenting procedures.
- Help to provide consistency among an agency's multiple offices.
- Serve as a model for jurisdictions that have yet to develop permitting regulations.
- Provide an online forum for maintaining and communicating permitting processes, and for making documents available.
- Provide the data and background analysis needed to inform policymakers and stakeholders in developing new regulations, policies and rules.
- Provide service to agencies in times of continually decreasing budgets.
- Decrease project risk by reducing delays and costs and eliminating uncertainties.
- Provide greater assurance to stakeholders that the project will be conducted in a technically, environmentally, and socially responsible fashion.



"The single biggest problem in communication is the illusion that it has taken place."
-George Bernard Shaw

WHITE HOUSE INITIATIVES

The activities in this project help to support the following initiatives:

White House Executive Order (March 22, 2012) -- *Improving Performance of Federal Permitting and Review of Infrastructure Projects*

White House Report (June 2012) -- *Implementing EO 13604 on Improving Performance of Federal Permitting and Review of Infrastructure Projects: A Federal Plan for Modernizing the Federal Permitting and Review Process for Better Projects, Improved Environmental and Community Outcomes, and Quicker Decisions*

Presidential Memorandum (May 17, 2013) -- *Modernizing Federal Infrastructure Review and Permitting Regulations, Policies, and Procedures*

White House Report (May 2013) -- *Rebuilding America's Infrastructure: Cutting Timelines and Improving Outcomes for Federal Permitting and Review of Infrastructure Projects*

Presidential Memorandum (June 7, 2013) -- *Transforming our Nation's Electric Grid Through Improved Siting, Permitting, and Review*

White House Fact Sheet (May 14, 2014) -- *Building a 21st Century Infrastructure: Modernizing Infrastructure Permitting*

White House Implementation Plan (May 2014) -- *Implementation Plan for the Presidential Memorandum on Modernizing Infrastructure Permitting Steering Committee on Federal Infrastructure Permitting and Review Process Improvement*

Photo by Pete Souza/White House

EXAMPLE SUCCESS STORIES

Reducing Duplication
An Example of Impact in Nevada

Concern: Water monitoring was required at the federal, state, and locals levels - different sets of design and reporting requirements.

Action: Agencies agreed to coordinate: create one set of requirements incorporating needs of all agencies; develop one reporting form; establish a single agency as point of contact.

Outcomes: Saves developers time and effort and makes agencies more aware of the concerns and requirements of other jurisdictions; increases communication among agencies.

Facilitating Communication
Providing Clarity Among Agencies in California

Concern: Understanding authority in California is difficult. Jurisdictional authority changes from county to county.

Action: Development of roadmaps and meetings with agencies/industry. The roadmap outlines nuances, leading developers/agencies to better understand permitting in California.

Outcomes: Roadmaps indicating appropriate contacts for each permit by jurisdiction. Roadmaps are helpful not only to developers, but also to agency personnel when navigating complex permitting structures.

Providing Certainty in Uncharted Territory
Development of the Regulatory Roadmap for Colorado

Concern: Because no geothermal power had yet been developed in Colorado, investors were worried about funding a project that would be the first to test the permitting landscape in this state.

Action: Worked with local, state, and federal agencies in Colorado to roadmap the regulatory and permitting process for geothermal development in Colorado.

Outcomes: Provided more confidence to investors; state agencies used roadmap to train employees in new regulations.

Providing Guidance to States
Development of Geothermal Regulations in New Mexico

Concern: In 2014, New Mexico was in the midst of developing geothermal regulations, and determining the division of state authority among agencies.

Action: The RAPID team met with NM agency personnel to review the current NM regulations and information on geothermal regulations other states.

Outcomes: The information in the RAPID Toolkit served as a valuable resource to NM state agency personnel working to develop regulations to understand how geothermal was managed in other states and what might work best for NM.

FUTURE SUCCESS

Next Steps for *Us* (The RAPID Toolkit Team)

Increase Usability	•Conduct user interviews, focus groups, heat mapping of website, site statistics. •Redesign the website – Version 1 is scheduled for release 10/31/2014. Version 2 is already in the design phase, and is scheduled to be rolled out September 2015.
Add Content	•Plans to continue to work with transmission and solar groups to add content. •Kick off content development for hydropower in 2015. •Potential plans to add wind power in 2016.
Stakeholder Outreach	Gain commitment form agencies to adding and maintaining content: •Meet with as many agencies as possible. •At all levels – federal, regional, state, local •For all technologies •Try to get on agency agendas for regularly scheduled meetings. •Potentially develop promotional video with testimonials from agencies. •Continue working with the White House Implementation Plan team to incorporate into Federal Permitting Dashboard.

Next Steps for *You* (Agencies, Developers, Consultants)

Adopt RAPID (agencies)	•Watch relevant pages – you will get emailed with any modifications •Conduct annual review of relevant content – has your agency had any procedural changes in the past year that should be indicated in the Toolkit?
Use the Website	•Print out and bring to meetings with industry/agencies •Use as a tool to converse with applicants and other agencies •Use as a training manual for your staff
Provide Feedback	•Provide feedback on updates – on the site, email us •Edit data – update contact information, suggestions for others, upload documents to the library
Help to Spread the Word	•Share and discuss with others in your organization/agency •Discuss with superiors for adoption and maintenance (agencies) •Make agency personnel and other developers aware of RAPID and ask them to use and help to maintain it

PROJECT HISTORY

NREL Activities

- **2010** – Collect data on **geothermal** permits
- **2011** – Develop online geothermal **Developers' Checklist** on NREL domain – organized by state and by topic
- **2012** – Permitting Checklist becomes **Geothermal Regulatory Roadmap (GRR)**; Moves to OpenEI platform; Roadmap federal regulations and 8 states; Vet with agencies
- **2013** – Roadmap 2 additional states; Conduct 3 permitting analyses; Interface upgrades; Develop **NEPA Database**
- **2014** – Expand GRR and Atlas into **RAPID Toolkit**; Conduct 2 permitting analyses; Roadmap 2 geothermal states; Add solar federal roadmaps; Add bulk transmission federal roadmaps

TetraTech for Western Governors' Association

- Conduct permitting information needs assessment for **bulk transmission**
- Develop **Permitting Atlas** for **bulk transmission**

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September 28 – October 1, 2014
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