



Renewable Energy Projects
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Utility RE Needs = NM Renewable Portfolio Standard

- Based on Energy per year as a percent of retail load
 - 6% through 2010
 - 10% 2011-2014
 - 15% 2015-2020
 - 20% 2020+
- Must be provided from a diverse portfolio beginning in 2011
 - Wind and Solar each 20% of portfolio
 - Biomass/Geothermal 10% of portfolio
 - Distributed resources 1.5% growing to 3% (2015) of portfolio
 - Balance is discretionary

What are some renewable energy issues?

- Operation
 - Low capacity factors and/or small plant sizes translate into higher costs – must meet Reasonable Cost Threshold
 - Lack of dispatchability, or economic penalty for dispatching resource vs. must run
 - Intermittent Resource (solar and wind)
 - Power must be supplied around the clock
- Transmission
 - **Inefficient utilization of transmission capacity (must contract for 100% capacity factor)**
 - **Lack of available transmission capacity**
- Siting
 - **Proximity to load centers**
 - **Proximity to needed resources and infrastructure**
 - **Site complexities (ownership, characteristics/contours, contamination, etc.)**

PRC process and timing for development

- **Request for Proposals (RFP) process (7-10 months)**
 - **Create RFP (2 months)**
 - **Issue RFP (2 months)**
 - **RFP Analysis (1-2 months)**
 - **Negotiations (2-4 months)**

- **Regulatory approval process (3-15 months)**
 - **Include desired resource in annual Renewable Energy Procurement filing (3-6 months)**
 - **Or make CCN filing (6-15 months)**

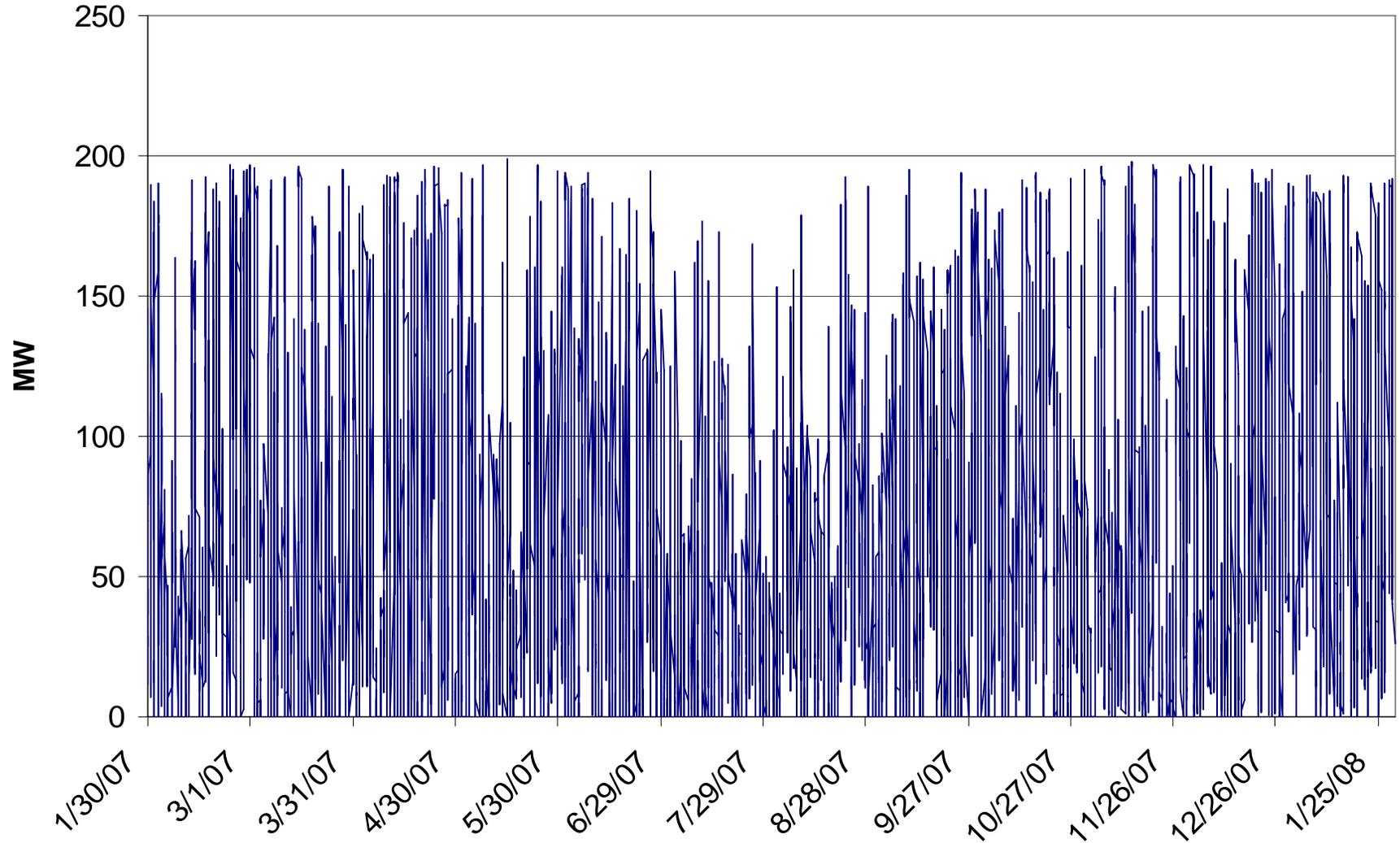
- **Project Construction (12-36 months)**

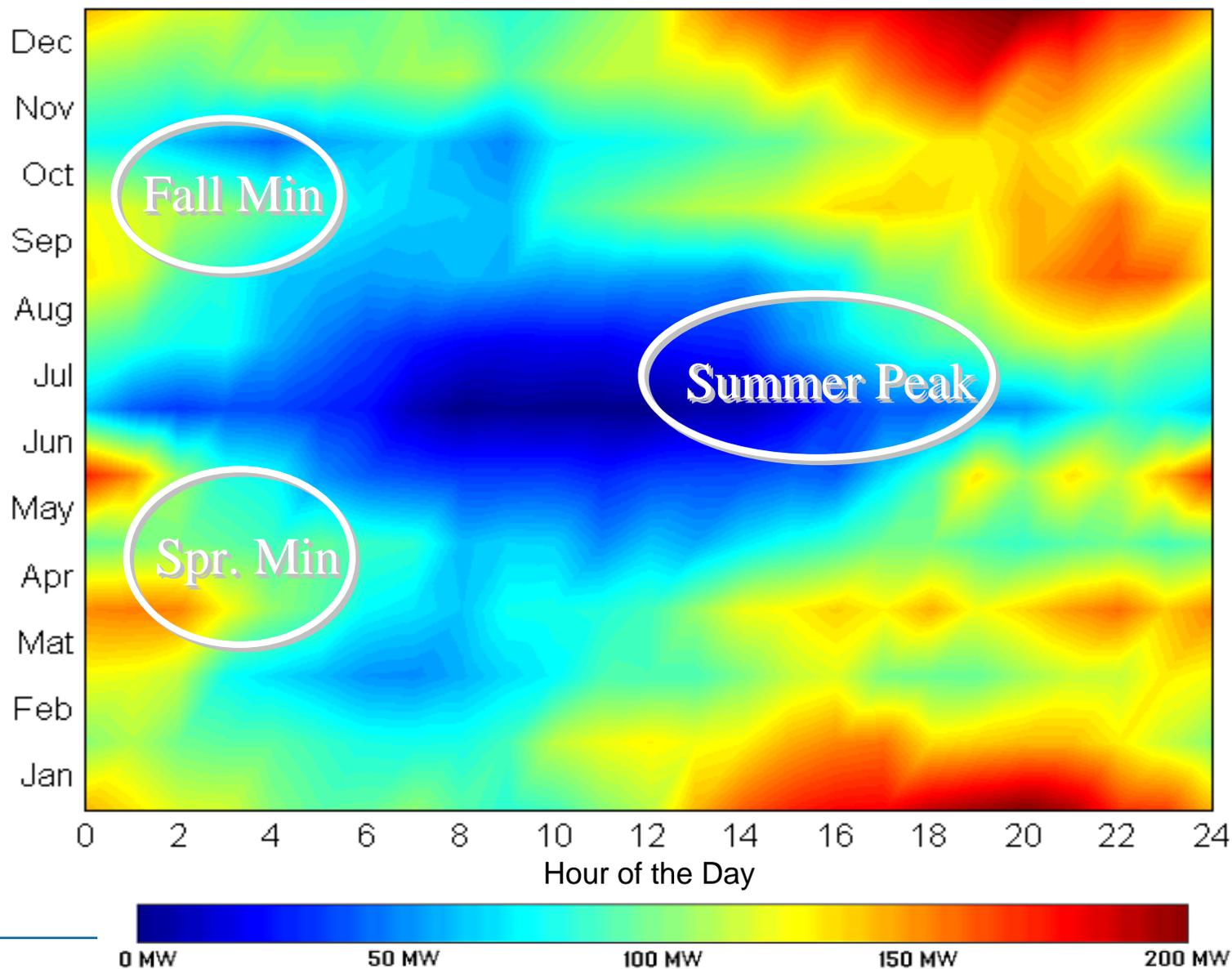
- **Total time to get project developed (2-5 years!)**

Economic incentives and financing RE projects

- **Incentives**
 - **Cost of money**
 - **Direct Loans**
 - **Loan Guarantee with no Fee**
 - **Tax-Exempt Financing**
 - **Cost reduction**
 - **Accelerated Depreciation**
 - **Cost Sharing**
 - **Federal tax incentives**
 - **Investment Tax Credit (ITC)**
 - **Production Tax Credit (PTC) with a Fixed Rate**
 - **NM State tax incentives**
 - **Investment Tax Credit (ITC)**
 - **Production Tax Credit (PTC) with a Variable Rate and Cap**
 - **Local tax incentive**
 - **Property Tax Exemption**
- **Financing**
 - **Combination of debt and equity**
 - **Utilities typically at 50/50**
 - **Independent power producers 70/30 or more**
 - **Monetization of tax credits**
 - **Taxable entity with ability to take all of the tax credits in 1st year of operation**

New Mexico Wind Energy Center





One day (1-minute intervals) from TEP Springerville

