
Peter W. Culp
Squire, Sanders & Dempsey L.L.P.
October 22, 2009
Project Siting in Arizona
Arizona Power Plant Siting Process

- Regulatory approval required from Arizona Corporation Commission (ACC) for large facilities (100 megawatts+)
  - Smaller facilities otherwise regulated under environmental laws
  - Transmission facilities for small projects may be regulated by ACC anyway (115kv regulatory cutoff)

- Two-stage process involving ACC and Arizona Power Plant & Transmission Line Siting Committee
  - Certificate of Environmental Compatibility (CEC) granted/denied by Siting Committee
  - ACC reviews and confirms/denies Siting Committee actions

- Complex, formal hearing process
  - 180 day timeframe, extensions common in complex cases
  - ACC staff automatic party to case
  - Intervenors may also become parties (environmental groups, political subdivisions, affected parties, etc.)
Power Plant & Transmission Line Siting Committee

- Siting Committee composed of 11 representatives of Arizona agencies and individuals appointed by the ACC to represent key interest groups and the public:
  - Chair: Arizona Attorney General (John Foreman)
  - Arizona Corporation Commission (David Eberhart)
  - Energy Office, Department of Commerce (Jack Haenichen)
  - Arizona Department of Environmental Quality (Paul Rasmussen)
  - Arizona Department of Water Resources (Gregg Houtz)
  - Incorporated cities and towns (Mike Whalen, Mesa)
  - Counties (Patricia Noland, Pima County)
  - Agricultural interests (Jeff McGuire)
  - General public (William Mundell – former ACC commissioner, Barry Wong - legislature, Mike Palmer-Cochise County)
Siting Case Preparation and Presentation

- Critical to meet *early* with ACC staff & regulatory agencies as part of development of project and the siting case
  - Agency staff can be great allies, or create great obstacles
- Permitting process involves careful development, review and evaluation of relevant technical documentation and presentation of the siting case
  - Analysis of a broad range of engineering, transmission, economic, and environmental issues
  - Siting application, procedures & exhibit preparation
  - Presentation of witness testimony and other evidence, including cross-examination of adverse witnesses
  - Briefing of legal issues and hearings/interactions with the Siting Committee & ACC, public notice and *ex parte* compliance
    - *Be aware of new rules on inappropriate communications* related to Siting Committee proceedings (Ariz. Admin. Code R14-3-220)
Siting Committee Considerations

- Siting Committee considers variety of factors in CEC process (A.R.S. 40-360.05):
  - Engineering, cost, routing, and process information for facility, facility site, transmission, and switchyards
  - Transmission system impacts
  - Compatibility with local ordinances and development plans
  - Air permitting
  - Water resources (including compliance with AMA goals)
  - Endangered species, biological resources
  - Cultural resources/archaeology
  - Scenic impacts, recreation & safety, noise & communications

- ACC criteria for final review/approval
  - ACC “shall balance, in the broad public interest, the need for an adequate, economical and reliable supply of electric power with the desire to minimize the effect thereof on the environment and ecology of this state” (A.R.S. 40-360.07(B))
Other Primary Permitting

- Local Zoning/Land Use Approvals
- Aquifer Protection Permit - ADEQ
- Clean Water Act
  - 404 – US Army Corps
  - Water Quality (stormwater, AZPDES) - ADEQ
- Clean Air Act/Air Quality
- NEPA
- ESA
- Important to recognize that it may be easier and faster to permit renewable facilities that will involve significant land disturbance and/or water use on previously-disturbed farmland
  - Important consideration when weighing site options (private, state land, federal)
Aquifer Protection Permitting

• Aquifer protection permitting program protects against groundwater contamination
  – Required for any facility that “discharges a pollutant either directly to an aquifer, to land surface, or vadose zone …. [such that] there is a reasonable probability that the pollutant will reach an aquifer”
  – Clean Water Act for groundwater

• General (simple) and individual (complex) APPs
  – Individual APPs apply to evaporation ponds at major electrical facilities and most point source discharges; stormwater normally under general APP

• Technology-based, compliance-based standards for pollution control and facility construction
  – Financial assurance mechanisms for post-closure costs
Air Quality

- Air quality permitting regulates emissions of major “criteria pollutants,” hazardous air pollutants, certain other activities
  - Criteria pollutants regulated to meet NAAQS under local SIP, FIP, or TIP
  - Most complex: Major source permitting (NSR/PSD), HAP permitting
  - Smaller sources regulated under Title V, local rules
    - Title V permits, general permits, regulatory restrictions (open burning, emissions control, etc)
- Most energy facilities (even renewables) have some level of air quality permitting obligations (backup generators, supplemental heat sources, surface disturbance)
- Multiple air quality management agencies with separate geographic jurisdictions
  - ADEQ: wherever not otherwise regulated
  - Maricopa County
  - Pima County
  - Pinal County
  - EPA: Tribal lands (except Salt River Pima (TAS))
Dust Control

- Fugitive dust control a major feature of local Arizona programs and SIP
  - Example: Maricopa County (Rule 310)
    - Dust control permit for land disturbance over 0.1 acre; rights of way, roads, open areas also regulated
    - Visible emissions requirements; stabilization requirements; control measures; track-out, carry-out, spillage, and/or erosion requirements; soil moisture requirements; dust control plans; monitoring and recordkeeping
  - Pinal County
    - (Rule 4-3-060 *et seq*) – activities disturbing over 0.1 acres, roads, non-point sources
  - Pima County
    - 1 acre disturbance, trenching, road construction
    - ADEQ – Requires general control of dust emissions
National Environmental Policy Act (NEPA)

- NEPA triggered by “major federal action”
- Requires preparation of EA or EIS evaluating wide range of potential project impacts
  - Programmatic EIS issues for development on BLM lands discussed elsewhere in this program
- NEPA can also be triggered by other “federal nexus”
  - Infrastructure crossings on federal land
  - Federal permitting
- NEPA can significantly complicate siting processes by generating far more substantial volumes of information about a proposed project
  - Increased opportunities for public objection, development of neighboring landowner concerns, environmental groups, etc.
Permitting Coordination

• Presentation of a successful siting case requires careful coordination of other permitting activities
  – Timing of permit issuance and coordinating and aligning permit conditions
    • Important to track potential effects of reductions in state agency capacity as a result of budget crisis (e.g., current proposals to suspend Licensing Time-Frames)
  – NEPA, water issues, and air permitting particularly important and can be a source of problems
    • Permitting can generate new questions and concerns and generate spill-over between public input processes

• Important to ensure close coordination of permitting work and PR with the central siting case
  – Management of agency interactions and communications
  – Coordination of public and community outreach, usually through a designated PR firm
The Current Siting Committee & ACC

- Paul Newman and Sandra Kennedy campaigned as Arizona’s “Solar Team”
  - Together with ACC Chair Kris Mayes, generally indicates increased support for renewable energy projects at ACC
- ACC, Siting Committee, and environmental/citizen advocates appear inclined towards greater support for renewable energy facilities at present
- However, current solar rush may ultimately lead to increased scrutiny akin to the previous “merchant power” boom in the early 2000s
  - Merchant power rush led to significant consideration of air, water impacts, as well as local concerns
  - Imposition of significant conditions on CEC issuance, including assistance to local communities to bolster local public services, dry cooling to limit water use, legislation to regulate local groundwater basins, associated renewable energy requirements, and other conditions
Importance of Community Outreach

- Recent Committee & ACC attention (Solana & Coolidge) has focused on transmission impact & safety concerns, water impacts, wildlife, and homeowner impacts

- Siting Committee and ACC have historically been quite deferential to local community and landowner concerns

- Critical to make appropriate investments of time and energy in developing local relationships, political support
  - Effective local community outreach and local government support a key element; can make or break energy projects
  - Talk to potential intervenors and opponents before siting proceedings commence to address issues
Water Rights in Arizona
Water Rights in Arizona

• In Arizona, water belongs to the public
  – “Water rights” are privileges of use
  – The privilege differs based on the type, source, and location of water

• 3 basic types
  – Surface water: prior appropriation
  – Groundwater: complex
  – Colorado River water
    • Law of the River (on-river)
    • Central Arizona Project contracts
Surface Water Rights in Arizona

- Surface water rights governed by law of “prior appropriation.”

- Tracked through registration process at Arizona Department of Water Resources
  - Subject to General Stream Adjudications (Little Colorado and Gila River)

- Appurtenant to specific lands, but potentially transferable pursuant to transfer statutes

- Generally not the most desirable water rights for energy projects (not entirely reliable, environmental complications)
Groundwater Regulation

- Arizona separately regulates surface water and groundwater
  - While surface water is regulated under prior appropriation, groundwater is regulated under “reasonable use” doctrine
  - Exception: “subflow” – groundwater that is legally regulated as surface water
- Rural groundwater basins regulated differently than some urban and agricultural basins
- 1980 Arizona Groundwater Management Act established regulated zones of groundwater use
  - Active Management Areas
  - Irrigation Non-Expansion Areas
Groundwater Rights - AMAs

- Groundwater use in Active Management Areas (Phoenix, Pinal, Tucson, Prescott, Santa Cruz) closely regulated by GMA
  - Groundwater rights and use permitting
- Historic grandfathered rights: 3 types:
  - Irrigation Grandfathered Rights (IGRs)
  - Type 1 Groundwater Rights
  - Type 2 Groundwater Rights (including for electric generation)
- Industrial Use Permitting
  - Requires demonstration of compatibility with groundwater management goals, hydrologic analysis
- Arizona siting laws specifically require evaluation of whether proposed facility will be compatible with AMA management goals
Groundwater Rights – Ex-AMA

- Outside of AMAs, groundwater generally regulated by doctrine of “reasonable use”
  - Basically, unregulated
  - Exception: Harquahala INA, where partial restrictions on commercial and industrial use are in place
  - General prohibition against interbasin transfers of groundwater (some exceptions)

- However, this doesn’t mean that water will not be an issue in siting
  - Water has been raised as a significant issue by the Siting Committee in the past
  - Particularly where operations may cause impacts to adjoining landowners or environmental harms
Colorado River Rights

- Colorado River controlled by “Law of the River” – complex array of federal and state laws, regulations, interstate compacts, court decrees, contracts, and international agreements
  - In Lower Basin, access to Colorado River water governed by water delivery contracts with the U.S. Bureau of Reclamation
  - Colorado River water subject to potential shortages, depending on priority
- Transfer of Colorado River water rights requires both federal and state approvals
  - ADWR guidance on transfer of Colorado River water rights
- Central Arizona Project carries Colorado River water from the Colorado River to Central Arizona
  - Contracts for CAP water managed through CAWCD; not widely available, but access may be available through local water providers
Nevada Permitting & Water Rights – a Brief Overview
Nevada Public Utility Commission Siting

• Nevada Public Utility Commission regulates facility siting under the Utility Environmental Protection Act (N.R.S. 704.820 - 704.900)

• UEPA governs construction of most major electrical generating facilities in Nevada
  – In counties with a population of 100,000 or more, permits regulated by local air quality boards and agencies
    • Transmission facilities may be regulated anyway (200kv is the regulatory cutoff)
  – Regulatory cutoff of 35 MW for renewable energy projects

• 2009 legislation will eliminate UEPA’s 100,000 population exception and increase renewables cutoff to 75 MW, effective January 1, 2010 (SB 395)
PUC Siting Case

- Hearing process similar to Arizona’s; parties include Division of Environmental Protection staff and potential intervenors: local governments, environmental groups, others

- Consideration of wide range of engineering, transmission, economic, and environmental factors
  - Required to balance need and environmental impacts; minimize adverse environmental effects considering available technology and economical alternatives
  - Conformance with state and local laws/regulations
    - Permit may be conditioned on completion of outstanding permits
  - Serves public interest
Other Major Permitting

- Land use approvals
- Clean Air Act/Air quality
  - Like Arizona, Nevada has separate, county-level air quality agencies in Clark and Washoe
  - NV Bureau of Air Pollution Control regulates rest of state AND all fossil-fuel fired generating facilities
- Clean Water Act
  - 404, NPDES (approved state program)
- Groundwater discharge permitting
  - Similar to Arizona APP
- NEPA
- ESA
- **Streamlined state-level permitting is available in Nevada for renewable energy projects (air and water quality)**
Water Rights in Nevada

- Founded on prior appropriation
- Surface water
  - All major sources decreed
  - Historic, consumptive use
- Groundwater
  - Managed in 232 recognized basins
  - Decreed
  - Many NV basins overdrafted or at least “overappropriated” (on paper)
- Both groundwater and surface water regulated by State Engineer (Nevada Division of Water Resources)
  - Regulated separately, but connection recognized
  - Nevada water law recognizes both supplemental and comingled rights
State Engineer

- State Engineer regulates:
  - Appropriation
  - Adjudication
  - Distribution & Regulation
  - Water Planning

- Groundwater basins may be “designated” by State Engineer
  - Permit required to drill well, remove groundwater in designated basins
  - Priorities/preferences can be imposed
  - Additional regulatory requirements on water use, well depths, etc.
Nevada’s Designated and Undesignated Groundwater Basins

Source: Nevada Division of Water Resources
Permitting Process

• Similar permitting process for groundwater and surface water rights in Nevada

• Entities seeking a new water right must apply to the State Engineer for an appropriation
  – Application review
  – Public notice
  – Hearing and protest procedure
  – Exception: “vested” rights (pre-1905 for surface water, pre-1913, 1939 for artesian/groundwater)

• Essentially same process for change in existing right/use
Water Permitting Considerations

- Permitting considerations (State Engineer): 4 primary criteria
  - Water available from proposed source
  - Does not conflict with existing rights
  - Cannot prove detrimental to the public interest
  - Additional groundwater considerations: interference with existing wells
  - State Engineer can require any hydrological/environmental studies prior to application approval

- Groundwater basins regulated to maintain perennial yields
  - Normally limited to annual recharge, but additional withdrawals can be conditioned on basin imports
  - Interbasin transports permitted under regulatory program

- Once application granted, right is “perfected” based on demonstration of actual beneficial use