

Regulatory Requirements Relating to Renewable Energy Development in Iowa (9/4/09)



Iowa Utilities Board (IUB) Authority (Iowa Code 476, 476A, 476B, 476C, 478)

- Iowa Code 476.1A -476.1B:
 - Exempts electric cooperatives and municipal utilities from IUB rate regulation.
 - Result: Most IUB rules on renewable generation requirements (199 IAC 15) apply only to rate regulated utilities.
- IUB regulates ALL utilities for safety and engineering standards.
- IUB regulates the siting of generation (Iowa Code 476A) and transmission (Iowa Code 478).
- IUB processes applications for wind and renewable energy tax credits (Iowa Code 476B and 476C).



IUB Requirements for Interconnection at Distribution Voltage Level (199 IAC 15)

- 199 IAC 15.10 - Applies to all utilities and all generators interconnecting at distribution level:
 - Sets minimum power quality and safety standards for interconnection at distribution voltage.
 - Establishes utility review procedures for interconnection requests.
 - Grants the utility access rights to the generator's equipment for inspection and testing.
 - Allows for emergency disconnection of the generator by the utility.



Renewable Generation Requirements for Rate Regulated Utilities (199 IAC 15)

- 199 IAC 15.4:
 - Requires rate regulated utilities to interconnect with qualifying cogeneration and renewable energy facilities (QFs).
- 199 IAC 15.8:
 - Requires QFs to pay all costs of their interconnection.
- 199 IAC 15.5:
 - Requires rate regulated utilities to purchase electricity from QFs based on the utility's avoided cost (what it would cost the utility to purchase or produce the same power itself).



Renewable Generation Requirements for Rate Regulated Utilities (199 IAC 15)

- 199 IAC 15.5 (continued):
 - Rate regulated utilities maintain standard tariff purchase rates for facilities 100 kW or smaller.
 - Purchase rates for facilities larger than 100 kW are set by the IUB in contested case proceedings, unless the parties can agree.
- 199 IAC 15.11(5) Net Metering Rule:
 - Requires rate regulated utilities to offer “net metering” interconnection for renewable energy facilities (where the customer receives and sends back electricity over the same meter, netting one against the other).



Renewable Generation Requirements for Rate Regulated Utilities (199 IAC 15)

- Net Metering Rule details:
 - Rule defines net metering as “a single meter monitoring only the net amount of electricity sold or purchased.”
 - Is intended for small renewable generators built primarily for the customer’s self-use (limited to 500 kW per customer in utility tariffs).
 - Does not require the utility to apply or “net” the generator’s output against multiple independently metered locations (remote net metering).



Renewable Generation Requirements for Rate Regulated Utilities (199 IAC 15)

- More on Net Metering:
 - Current net metering practice under rate-regulated utility tariffs:
 - Net metering is limited to AEP capacity of 500 kW (electricity output is prorated for AEP facilities larger than 500 kW).
 - If the net metered facility produces excess electricity, it's carried forward for net metering in future months rather than purchased at avoided cost.
 - The utility may install special metering at the utility's expense.



Requirements for Wind & Renewable Energy Tax Credits (199 IAC 15)

- 199 IAC 15.18 & 15.20 (Wind Energy Tax Credits)
 - 1.0¢ per kWh - applies to both sales and self-use.
 - Limited to 150 MW total capacity.
 - Individual project capacities not less than 2 MW (0.75 MW for schools & hospitals) and no more than 30 MW.
 - Active applications total 25.5 MW (124.5 MW remaining).
- 199 IAC 15.19 & 15.21 (Renewable Energy Tax Credits)
 - 1.5¢ per kWh - applies to sales only (not for self-use).
 - Targets smaller projects and specific ownership types.
 - Limited to 330 MW for wind, 20 MW for non-wind.
 - For wind, applications total 310.65 MW (19.35 MW remaining).
 - For non-wind, active applications exceed capacity limits.



Renewable Generation Requirements for Rate Regulated Utilities (199 IAC 15)

- Questions about 199 IAC 15:

Contact: John Pearce
 515-281-5679
 John.Pearce@iub.state.ia.us



IUB Requirements for Generation Certificate (199 IAC 24)

- Certificate required for the construction and operation of generation plant facilities.
- 199 IAC 24.2:
 - Defines “facility” as electric generating plant with combined nameplate capacity of 25 MW or more.
 - Thus, generating plant with combined capacity of less than 25 MW is exempt from rule requirements.
 - Through a series of Declaratory Rulings, the IUB has determined that wind farms larger than 25 MW can also be exempt if configured so that total capacity on each feeder line is less than 25 MW (see DRU-03-2).



IUB Requirements for Generation Certificate (199 IAC 24)

- Questions about 199 IAC 24:

Contact: Parveen Baig
515-281-8644
Parveen.Baig@iub.state.ia.us



IUB Requirements for Transmission Line Franchise (199 IAC 11)

- 199 IAC 11.1 - Basic Requirements:
 - Franchise required for the construction and operation of electric transmission line operating at a voltage of 69 kV or higher.
 - Iowa Electrical Safety Code requirements (199 IAC 25).
 - Route selection requirements (details important).
- 199 IAC 11.2 and 11.3:
 - Filing requirements for franchise petitions.



IUB Requirements for Transmission Line Franchise (199 IAC 11)

- 199 IAC 11.4 - Informational Meetings:
 - Petitioner must conduct informational meetings in each county affected by the proposed transmission line, before the franchise petition is filed.
- 199 IAC 11.5 - Public Notice Requirements
 - Informing the public about:
 - Informational meetings regarding the transmission line.
 - Filing the franchise petition with the IUB.
 - Eminent domain (property taking) proceedings.



IUB Requirements for Transmission Line Franchise (199 IAC 11)

- Potential time frame:
 - If petition is unopposed and no hearing is requested, the entire process (including informational meetings) can be completed within 6 months.
 - If opposed by property owners or other interested parties, the process will likely involve a hearing and take longer, especially if eminent domain (property taking) issues are involved.
 - Process can be even longer if later contested in court.



IUB Requirements for Transmission Line Franchise (199 IAC 11)

- Questions about 199 IAC 11:

Contact: Don Stursma
515-281-5546
Don.Stursma@iub.state.ia.us



Interconnection at Transmission Voltage Level

- Federal Jurisdiction - Federal Energy Regulatory Commission (FERC)
 - Interconnection requests enter a queue and are taken on a “first come first served” basis (or, on a “first ready first served” basis in the case of MISO).
 - Each interconnection request must be studied for how it will affect the transmission network and what network upgrades (if any) will be necessary to accommodate the interconnection.
 - The interconnecting generator must pay all interconnection costs, and may be required to pay some of the network upgrade costs.



Interconnection at Transmission Voltage Level

- Potential time frame for the queuing and study process depends on:
 - Number of interconnection requests in the queue.
 - Available network capacity.
- In Iowa, the queuing and study process usually involves one of two FERC-regulated regional transmission organizations:
 - Midwest Independent Transmission System Operator (Midwest ISO - or MISO)
 - Mid-Continent Area Power Pool (MAPP)



Interconnection at Transmission Voltage Level

- Which of the two regional organizations is involved will depend on the utility or transmission company initially approached for interconnection.



Interconnection at Transmission Voltage Level

- Questions about MISO:

Midwest ISO

701 City Center Drive

Carmel, IN 46032

317-249-5400

www.midwestmarket.org/page/Contact+Us

www.midwestmarket.org/page/Generator+Interconnection



Interconnection at Transmission Voltage Level

- Questions about MAPP:

Mid-Continent Area Power Pool

2774 Cleveland Avenue North

Roseville, MN 55113

651-855-1710

www.mapp.org

Mapp_communications@mapp.org



Interconnection at Transmission Voltage Level

- Other Questions:

Contact: Jeff Kaman
 515-281-3279
 Jeff.Kaman@iub.state.ia.us

