



MI ENERGY CODE UPDATE

Ann Arbor Energy Commission

2.13.24



*Accelerating to Zero
faster together!*

Jan Culbertson, FAIA

- Michigan Legislature delegates authority for code setting to Licensing and Regulatory Affairs (LARA)
- Within LARA, the Bureau of Construction Codes (BCC) handles regulations for construction codes

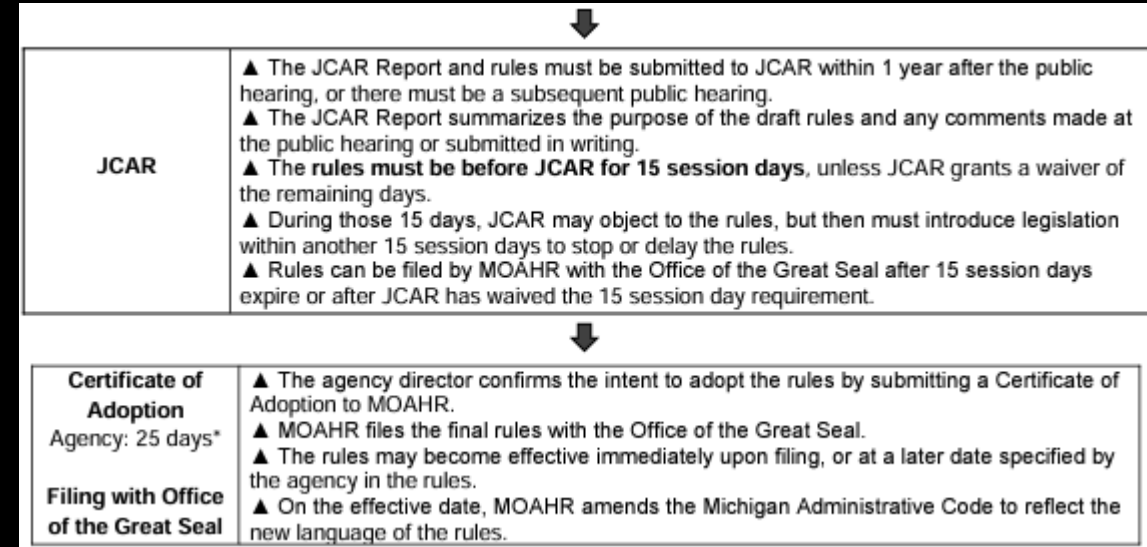
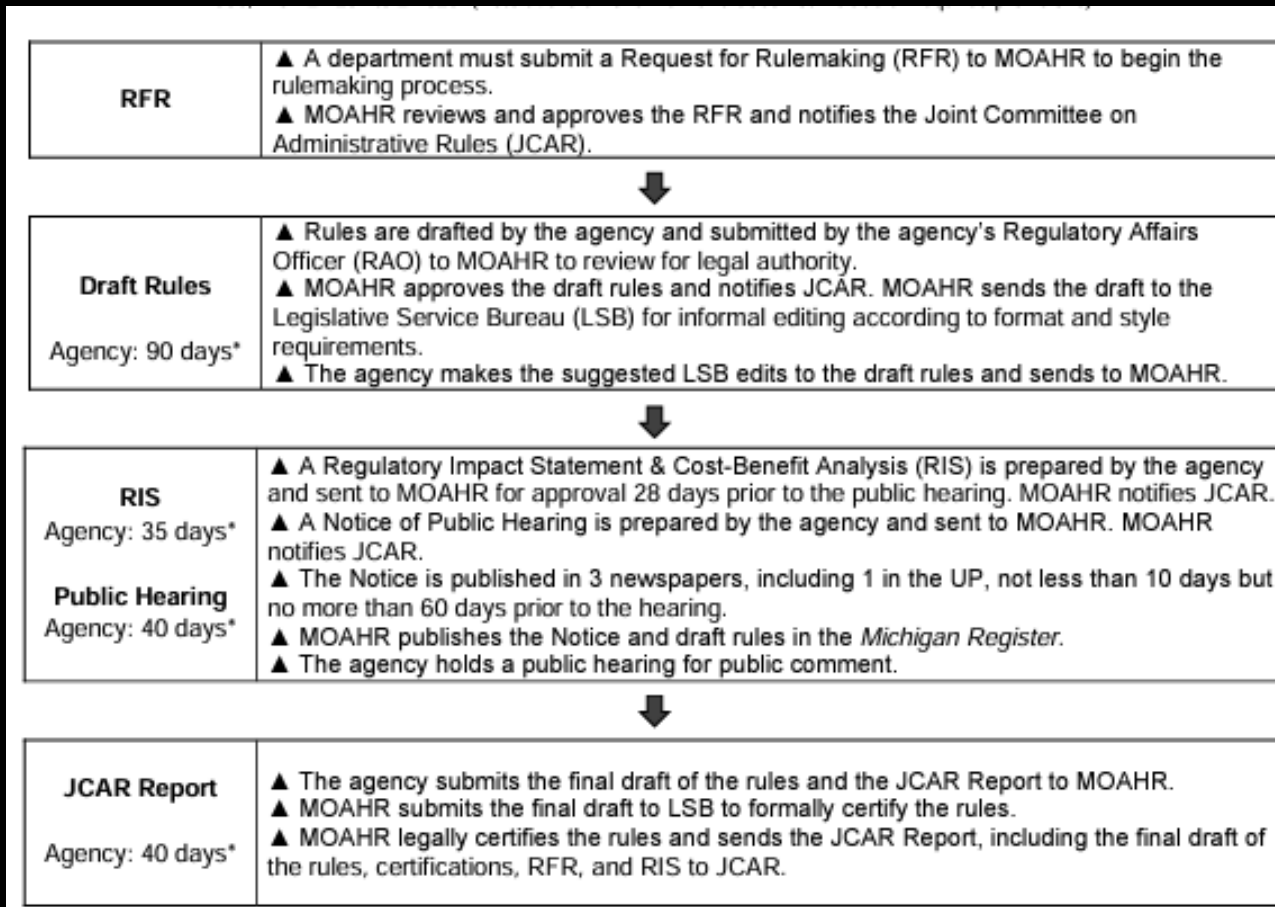


- Michigan Uniform Energy Code
 - Part 10: Residential
 - Adopts IECC
 - Part 10a: Commercial
 - Adopts both the IECC and ASHRAE 90.1

- Michigan Uniform Energy Codes applies to all new construction
- Existing buildings, under the Michigan Rehab Code
 - Repairs need not comply with 90.1
 - Any *alterations* must comply with 90.1
 - Unmodified systems/assemblies may remain non-compliant

- By state statute, LARA is supposed to update every 3 years

MI Energy Codes Overview



https://www.michigan.gov/lara/-/media/Project/Websites/lara/moahr/ARD/Education/Rulemaking_Process_Summary.pdf?rev=7450cb60e46f45b69bc4d4b4edd8f796&hash=7EF8B9900A5F36281031A8AE68F2A4D7

Rulemaking Process

- ASHRAE 90.1 is a voluntary standard
 - Similar: NFPA 13
 - Not a code – doesn't contain rules for enforcement
 - New edition every 3 years, with continuous maintenance
 - Covers commercial buildings only



- Int'l Energy Conservation Code (IECC) is a model code
 - Similar: International Building Code
 - New editions every 3 years
 - Covers commercial and residential
 - Each edition references 90.1 from two years prior



Commercial buildings shall comply with one of the following:

- ANSI / ASHRAE / IESNA 90.1
- IECC Sections C402 through C405
- An energy model compared to a standard model

2021 Michigan Plumbing Code & Mechanical Code

Were filed with the Secretary of State November 13, 2023, and are effective on March 12, 2024.

2023 Michigan Electrical Code

Was filed with the Secretary of State November 13, 2023, and are effective March 12, 2024.

2021 Rehabilitation Code

The 2021 Rehabilitation Code rules are now closed and the comments that have been received are in review.

2021 Building Code

The 2021 Building Code rules are now closed and the comments are in review.

2021 Michigan Uniform Energy Code (Part 10 Residential)

BCC public hearing 9:00 AM on February 22, 2024 (Lansing)

2021 Michigan Uniform Energy Code (Part 10a Commercial)

BCC public hearing 1:00 PM on February 22, 2024 (Lansing)

2021 Part 5 Residential Code

BCC public hearing 9:00 a.m. on March 21, 2024

■ Highlights of 90.1-2019

- Most requirements get more stringent
- Many “best practices” are now required
- A crackdown on inefficient RTUs
- Commissioning requirements expanded, including envelope, lighting, and power

- This is LAW. Not optional
- Enforcement can be lax
 - Local AHJs
- Responsibility of design professionals to respect, follow, and promote the Code

- IECC Appendix RB is adopted by LARA
 - Covers solar-ready residential
- Roof space for solar
- Electrical panel space for solar

- IECC Appendix CB is adopted by LARA
 - Covers solar-ready commercial
- Roof space for solar
- Electrical panel space for solar
- Energy storage space

ZERO CODE™

- IECC Appendix CC **not** adopted by LARA
 - Covers mandates for on-site or off-site renewable power
 - Gas is still allowed

- IECC Appendix RC **not** adopted by LARA
 - Covers residential on-site or off-site renewable power

ON-SITE RENEWABLES

■ LARA's position on Appendix CC

- “The most significant alternative, which was presented to the agency and not adopted, was the proposition to require all new structures or renovations be exclusively electric in nature. This would mean no use of propane or natural gas. This would result in extraordinarily expensive construction beyond the current normal practice. It also eliminates possible cheaper modes to energy. At best it creates a monopoly and at worst this alternative would grind new construction to a halt. As of May 16, 2022, the Midcontinent Independent System Operator is preparing for a projected short fall in energy capacity for June, July and August of 2022.”

Section 37 of Regulatory Impact Statement to 2021-49 LR, published 2023-09-26

- 90.1-2019: No requirements for on-site renewables
- 90.1-2022 will require on-site renewables
 - 0.25 W/sf, based on the three largest floors of the building
 - Only >10,000 ft² and new construction
 - Shaded, occupied, or equipment-heavy roofs exempt
- First time mandatory renewables added to a model code
- Unlike IECC Appendix CC, renewables must be ON SITE – no option for purchased off site
- ASHRAE believes this is cost effective in all solar zones
- Prescriptive – can trade off this requirement

ON-SITE RENEWABLES – look ahead

Commercial Energy Code (10a)



Update Information:

<https://ars.apps.lara.state.mi.us/Transaction/RFRTransaction?TransactionID=1307>


Residential Energy Code (10)

Update Information:

<https://ars.apps.lara.state.mi.us/Transaction/RFRTransaction?TransactionID=1306>

RFR Form  PDF  HTML



RFR Form updated on: 6/15/2021 10:25:52 AM

Draft Rule Language  Word

Draft Rule Language updated on: 1/17/2024 2:20:39 PM

RIS Form  PDF  HTML

RIS Form updated on: 1/11/2024 9:18:01 AM

Notice of Public Hearing  PDF  HTML

Notice of Public Hearing updated on: 1/17/2024 3:38:16 PM

MI Energy Codes

ANN ARBOR/WASHTENAW

2030

DISTRICT[®]



Legislative Action:

SB 274

Could it be adapted to pilot Appendix RC/CC?
Intent to require Carbon Neutral/Zero Energy new buildings by 2027

Require automatic adoption of new Energy Codes—we jumped a code cycle (IECC 2018) and IECC 2024 is in final stages prior to publication