

# IEP Meeting

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Carrie Bentley – Gridwell Consulting

[Cbentley@gridwell.com](mailto:Cbentley@gridwell.com)

916.217.1571

# About Gridwell Consulting

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Analysis and advocacy consulting firm located in Sacramento, California – [www.gridwell.com](http://www.gridwell.com)

- Educate, model, advise, and advocate
- Seminars on CAISO market, resource adequacy, and battery storage resources
- Due diligence and bid strategy
- Interconnection evaluation and contract negotiation services
- 2023 RA Landscape Report to be published October 2<sup>nd</sup>

*“All Things CAISO”*



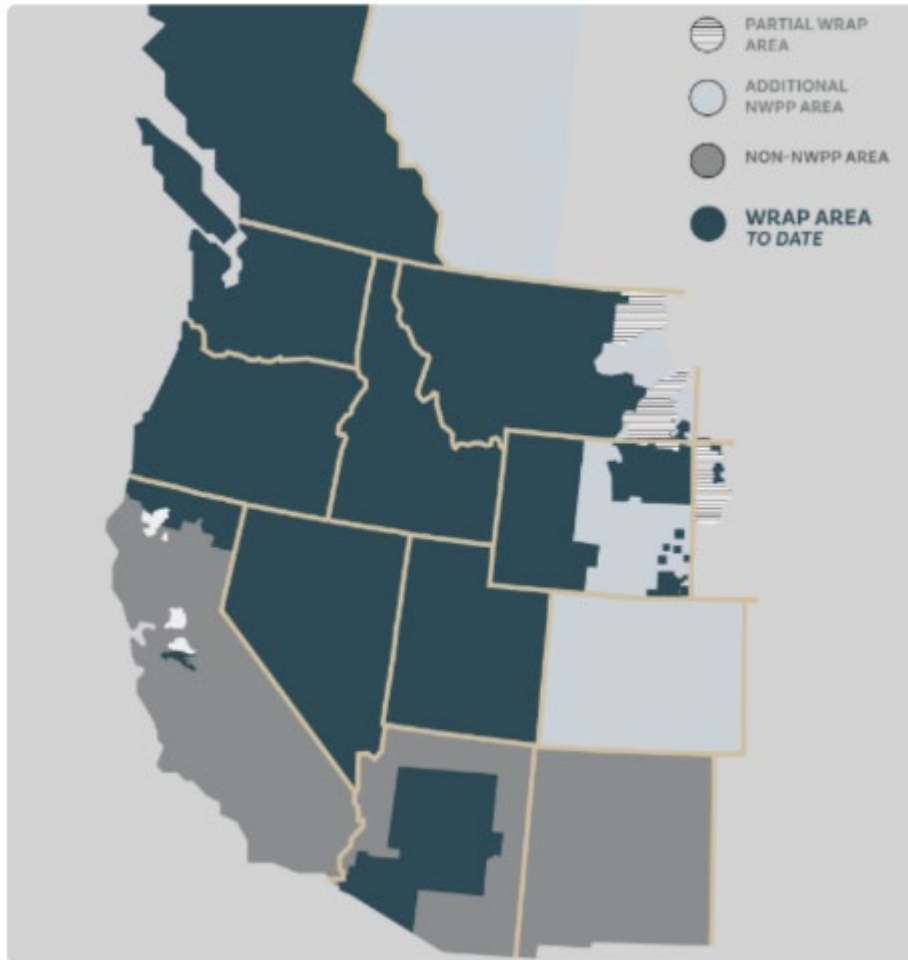
# CPUC Slice-of-Day impact

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- ✓ CAISO RA program changes
- ✓ Increased transaction costs
- ✓ Decreased diversity benefits
- ✓ Increased RA costs



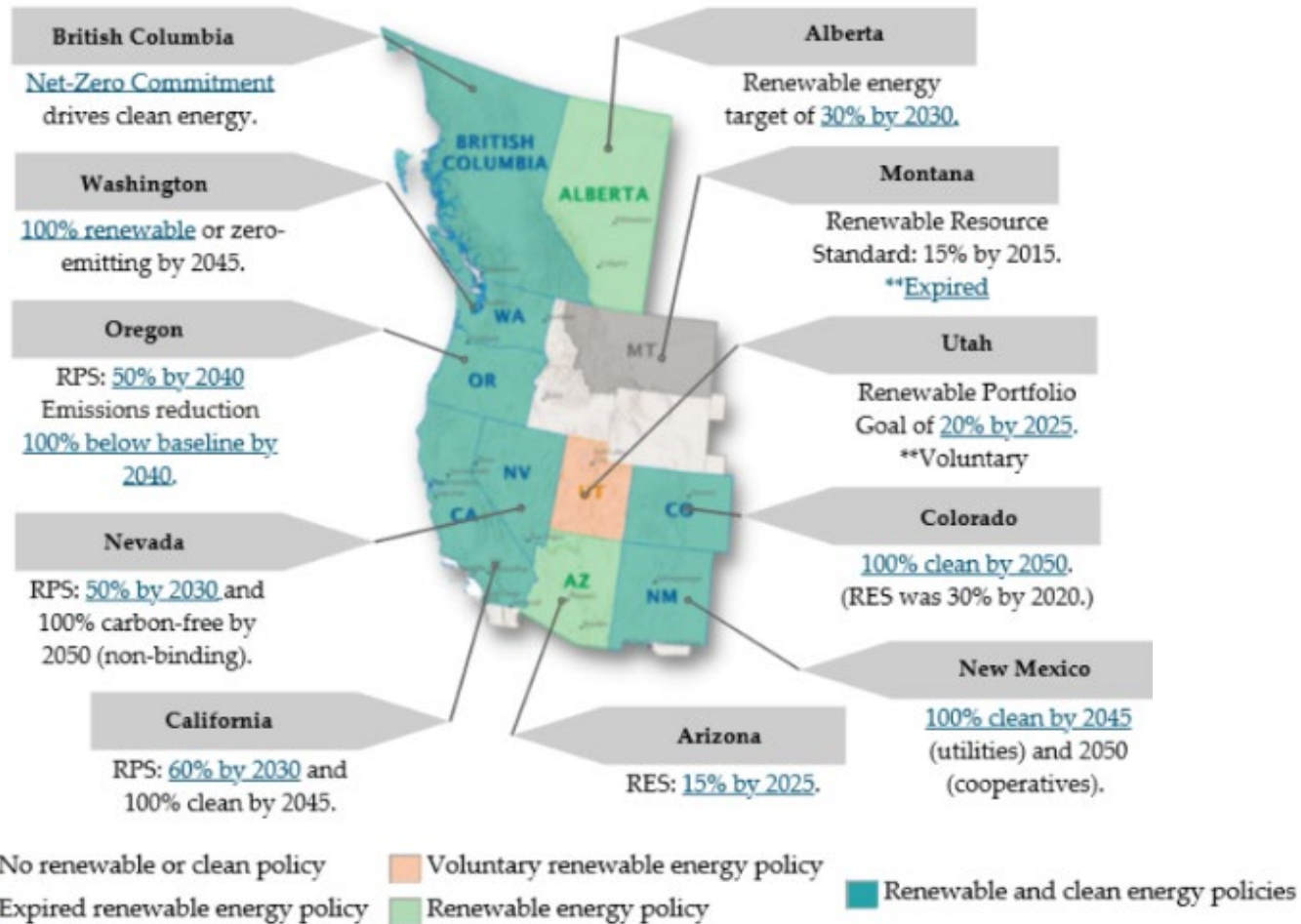
# Western Resource Adequacy Program (WRAP)



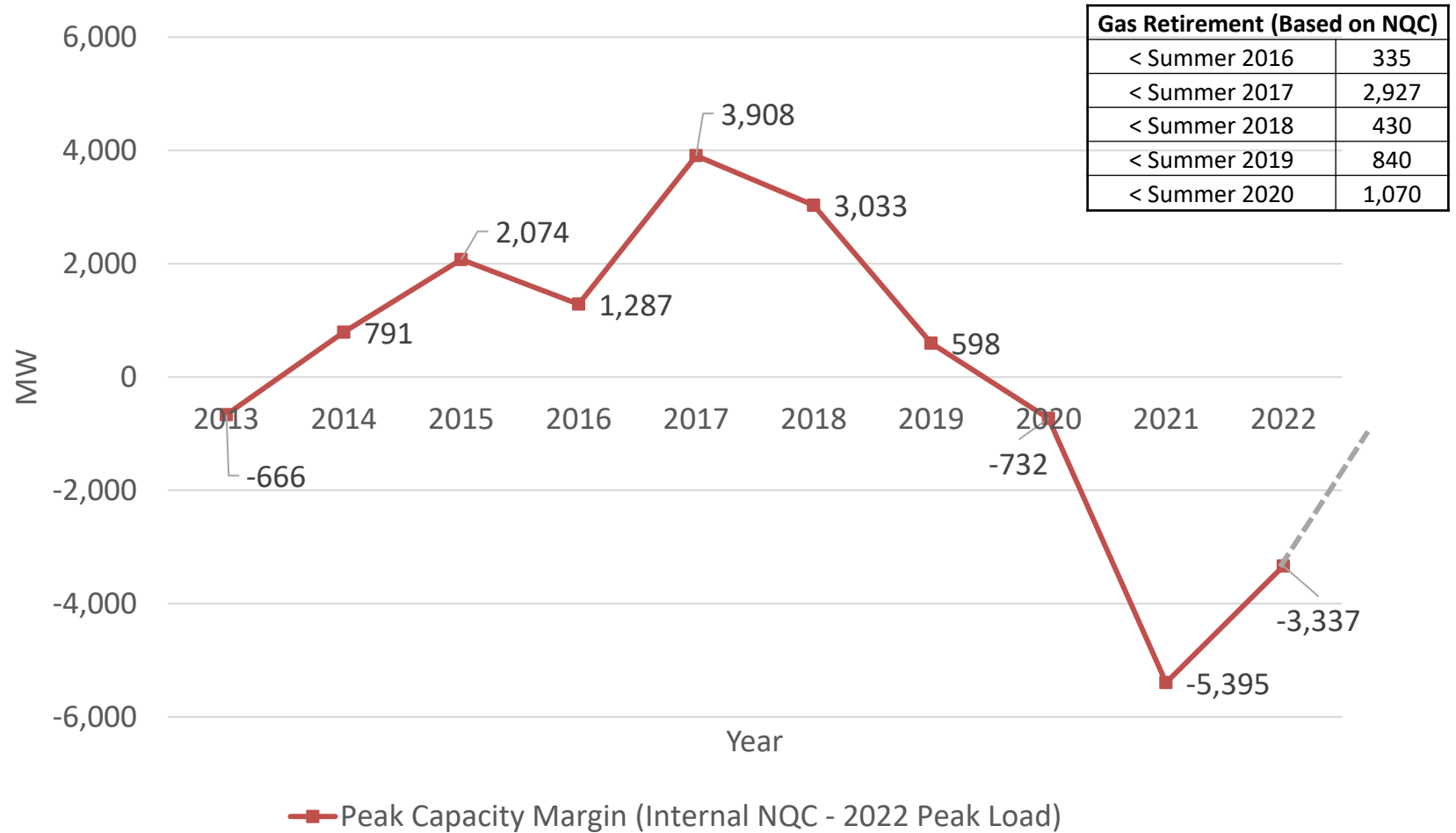
- Sets minimum PRM at 1-in-10 LOLE and has counting rules
- Includes 19 entities across 10 states and one Canadian province with peak load of 72,000 MW peak load
- Becomes binding in 2026, with ability for entities to delay
- Huge potential for regional diversity savings, key is that the transmission must enable deliverability where and when needed
- Several entities that are potential EDAM BAAs would likely operate under WRAP
- CAISO is having to evaluate the interoperability of WRAP with its RA program, and we expect that effort to be initiated in 2023



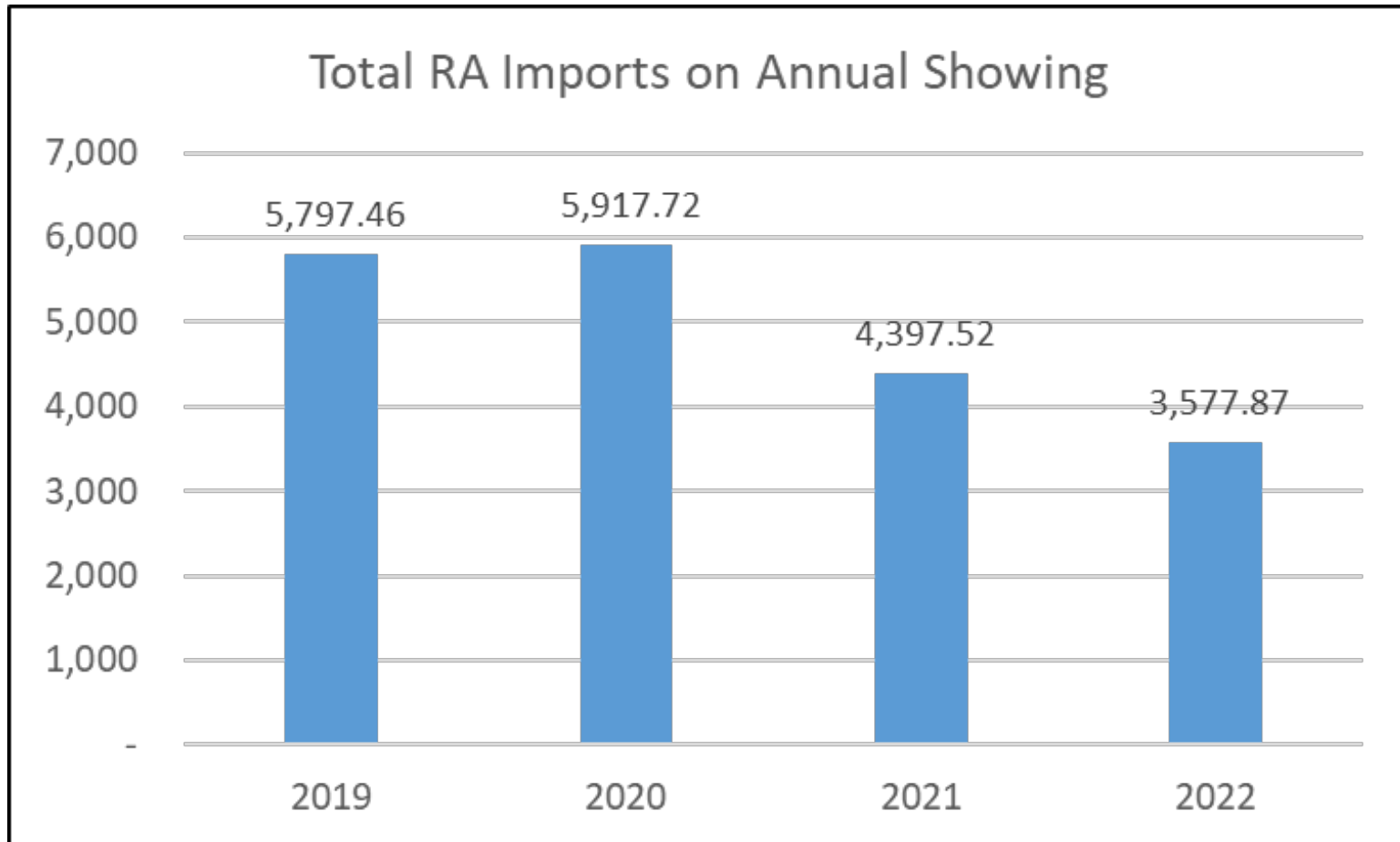
# Clean and renewable energy policies in the west



# CAISO excess peak capacity



# CAISO decreased annual RA imports



# Western Interconnection

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- The Western Interconnection is a large diverse area with many entities involved in planning efforts including:
  - 4 Reliability Coordinators
  - 34 Balancing Areas
  - 47 Transmission Operators
  - 298 Generator Owners
- The resource fleet is changing dramatically, with coal capacity decreasing 35% between 2017 and 2021 and wind and solar capacity increasing 45% and 75% respectively during that same period
- Western interconnection has two new RA programs expected in 2026 and 2025, the Western Resource Adequacy Program (WRAP) and the California Public Utility Commission (CPUC) Slice-of-Day methodology





# Current market environment

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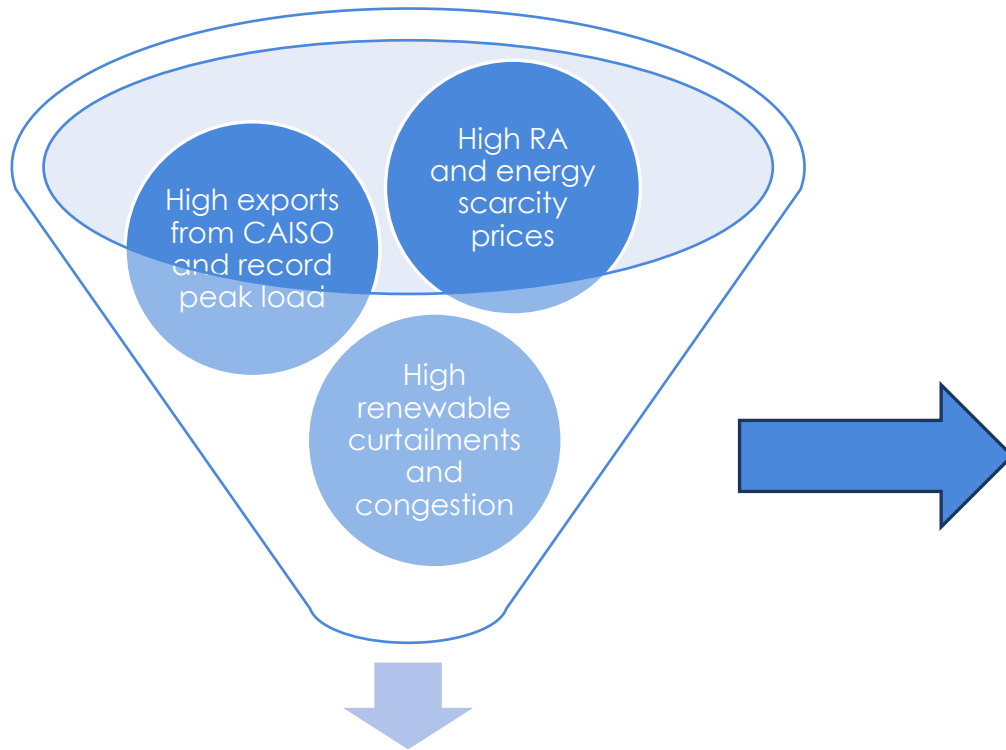


High Ratepayer Costs



# Current market environment

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High Ratepayer Costs

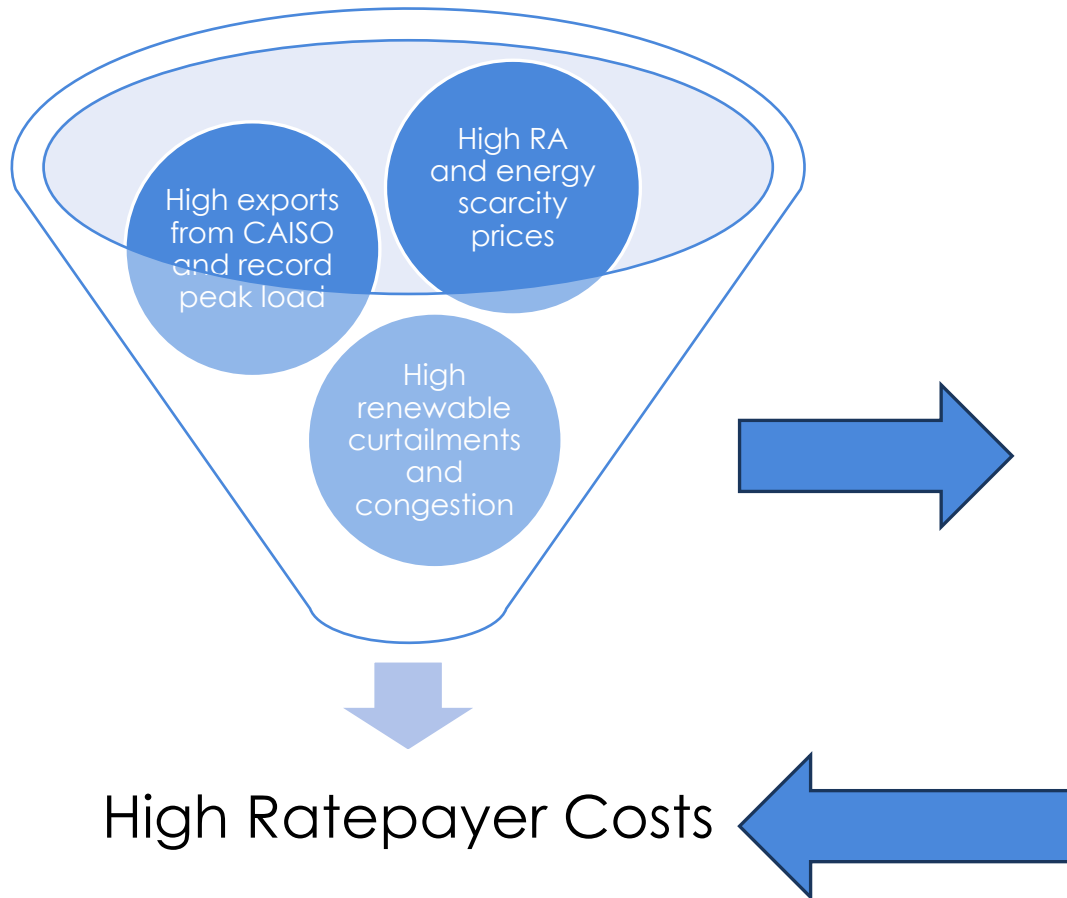
## Industry to do list

- ✓ Join WRAP
- ✓ Electrify west
- ✓ Address load impacts from climate change
- ✓ Retire gas fleet
- ✓ Build off-shore wind, hydrogen infrastructure, long-duration storage, carbon sequestration
- ✓ Rate design reform for low-income customers
- ✓ Get BA to join an RTO



# Current market environment

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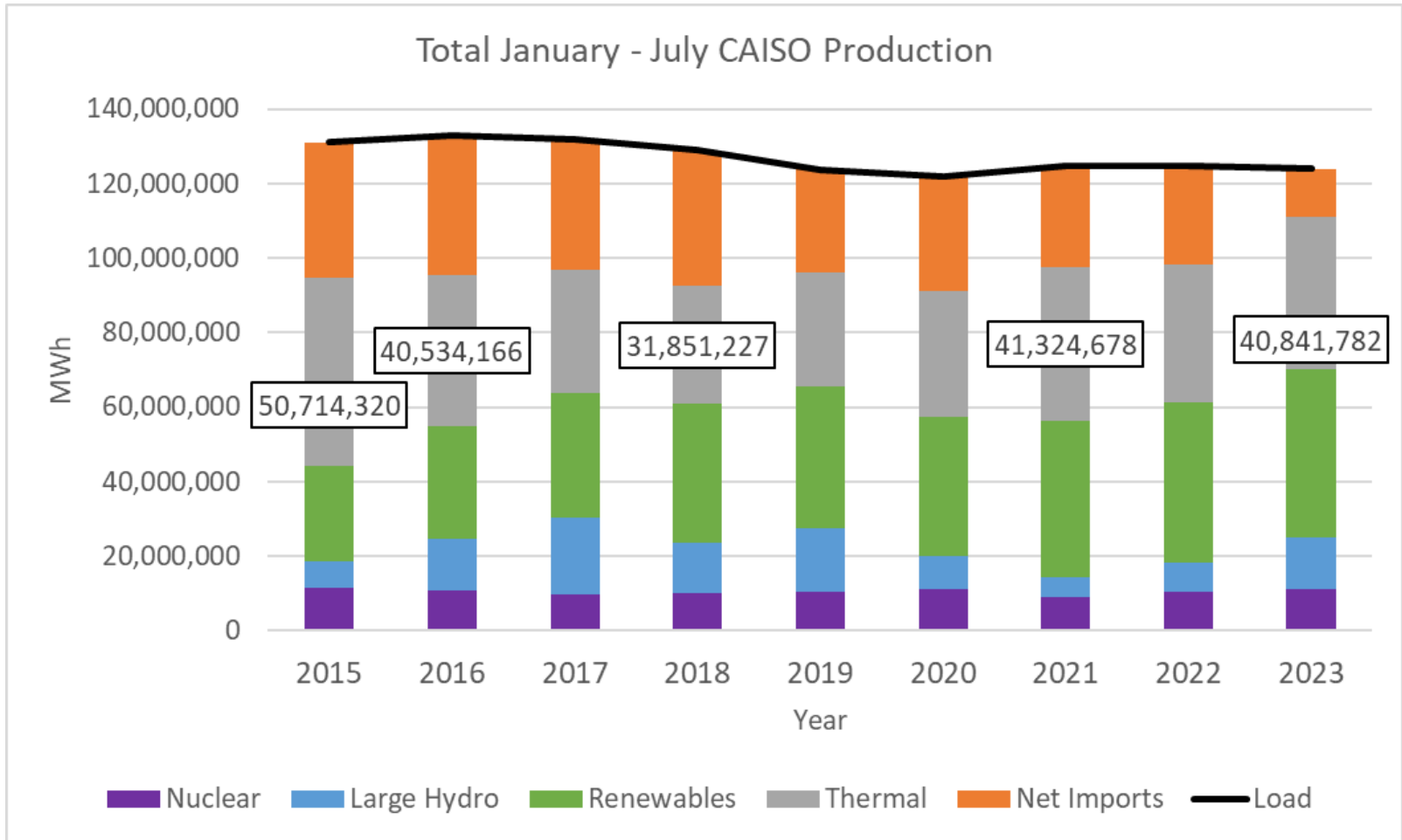


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# Resource production trend



# Contact Information

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Carrie Bentley

[Cbentley@gridwell.com](mailto:Cbentley@gridwell.com)

916.306.0754

[www.gridwell.com](http://www.gridwell.com)

