



Key takeaways:

1. New SAB Leadership elected for 2019. Jackie Carroll as Chair, Michael Steinle as Vice Chair.
2. Policy research by KU students on single-use plastics is moving forward. The partnership between the city and the University of Kansas has been invaluable to making progress.

**MINUTES**

**November 14, 2018 – 5:30 pm**

**Meeting Location:** Parks and Recreation Administration Building in South Park, 1141 Massachusetts St, Lawrence, KS 66044

**Members Present:** Sharon Ashworth, Ma'Ko Quah Jones, Rachel Krause, Jessi Lee, Dale Nimz, Adam Ritchie, Travis Robinett, Michael Steinle

**Members Not Present:** Jackie Carroll, Karen Lewis

**Staff Present:** Jasmin Moore

**Public present:** Several members of the public were present.

- I. Meeting called to order: 5:30 p.m.
- II. Approve October meeting minutes. Motion by Dale Nimz. Second by Michael Steinle. Motion passed.
- III. Presentation & Discussion: Westar (Evergy) Lawrence Energy Center. Presentation was given by Troy Mussetter, Westar Energy, Executive Director, Lawrence Energy Center. Presentation materials are included in the minutes, page 5.
- IV. SAB administrative items
  - a. **Appointments to SAB.** Rachel Krause, Jessica Lee, and Travis Robinett were reappointed to SAB through 12/31/21. Tresa McAlhaney was appointed to SAB, for a first term of 01/01/19 through 12/31/21. Two additional positions will be open in January 2019.
  - b. **SAB 2019 Leadership & Nominations.** Motion by Adam Ritchie to nominate Jackie Carroll as Chair. Second by Robinett. Motion passed. Motion by Robinett to nominate Steinle as Vice-Chair. Second by Lee. Motion passed. Secretary nominations were not held because of anticipated changes to the bylaws and the potential elimination of the position.
  - c. **Ethics.** The City Commission adopted Resolution No. 7269, on November 6, 2018. This resolution is an updated ethics policy and applies to City employees,

elected officials, and appointed officials, which includes advisory board members. SAB members should review the policy.

- d. **Bylaws.** SAB will review its current bylaws and make recommended changes to better align with Resolution No. 7224, a Resolution Adopting Standard Policies and Procedures Relating to Advisory Boards and Committee and Commissions of the City of Lawrence, KS. Staff will work with interested members of SAB to develop a draft for consideration at the January SAB meeting.

- V. **Update on Single Use Plastic Committee.** Research is underway with the assistance of Masters level policy classes at KU. Several students will provide additional analysis this semester as their final project. Policies are expected to be evaluated on policy effectiveness (% reduction of single use plastics- bags, straws, food-related), cost (annual expected cost to city, local businesses, average family of four), and equity implications (relative cost to low income families). Focused conversation with stakeholders (e.g. local environmental impacts, impacts to people with disabilities, businesses) are being planned for early 2019.

#### VI. **Staff Report.**

- a. **Downtown Master Plan.** The Downtown Master Plan is an initiative of the City Commission (not the Planning Commission). The first meeting of Downtown Master Plan steering committee was held on Nov. 1. The group is planning to convene three times throughout the process: the beginning, middle and end. There will be opportunities to engage in the process in the first quarter of 2019. The best way for SAB to find out about when and where they can engage in the process is to receive email updates, which can be signed up for on the City's website (<https://lawrenceks.org/strategic-plan/downtown/>). It is anticipated that the Downtown Master Plan will be presented to the City Commission at the end of 2019.
- b. **Urban Sustainability Directors Network Annual Meeting.** Jasmin Moore attended the USDN Annual Meeting of Sustainability Directors from US and Canada. Moore had the opportunity to highlight the Green Bonds work of the City of Lawrence, and participate in a roundtable about sustainable municipal finance. At the meeting, USDN announced 14 High Impact Practices with high aggregate impact potential across U.S. and Canadian cities to reduce greenhouse gas emissions. It is not a "must do" list for, nor necessarily even applicable to, every individual community, but does provide practices with high GHG reduction potential, each with potential to create other important benefits (e.g., resilience, equity, job creation). The City of Lawrence is already making progress on some, and may investigate the local application of additional practices.

14 High Impact Practices to Reduce Greenhouse Gases

Credit: Urban Sustainability Directors Network

#### **Transportation**

- **Major Public Transit Investments** - Make public transit investments that significantly enhance coverage, service quality, frequency, and/or speed (e.g., bond for major transit infrastructure).

- **Major Bike and Ped Investments** - Expand and improve bicycle and pedestrian facilities, connectivity, convenience, and/or safety in a manner that significantly increases the % of trips taken by walking or biking.
- **Community Electric Vehicles Adoption** - Require and encourage EV adoption through local codes, infrastructure planning, and promotion.
- **Autonomous Vehicles Planning** - Establish strategy and/or policy to avoid negative GHG impacts and achieve positive GHG impacts of autonomous vehicles.

#### **Energy Supply**

- **Renewable Energy Procurement for Government Operations** - Power government operations from renewable energy via on-site installation or off-site procurement.
- **Utility-Scale Renewable Energy** - Engage local utility or community choice program (as applicable) to increase renewable energy offerings to all community members.
- **Community Installation of Renewable Electricity** - Establish local incentives (e.g., solar rebates) and/or a bulk purchasing program (e.g., Solarize, community solar program) for on-site renewable energy at a scale catalyzing major new local investment.
- **State/Federal Advocacy on Energy Supply and Efficiency** - Engage in state public utility commission (or equivalent agency) proceedings to advocate for significant renewable energy (e.g., via state RPS, net metering tariffs) and building energy efficiency standards and funding.

#### **Building Energy Use**

- **Electrification of Building Energy Systems** - Develop a local strategy and enact programs to drive replacement of fossil fuel-fired space and water heating systems with high efficiency electric heat pump and similar technologies in new and existing buildings.
- **Energy Benchmarking for Large Buildings** - Require large commercial and multi-family buildings to benchmark and report their energy performance.
- **Energy Upgrades at Trigger Events for Large Buildings** - Require large commercial and/or multifamily buildings to perform energy upgrades achieving an average of ~15%+ energy savings by a certain date or at certain trigger events (e.g., time of sale, change of occupancy).
- **Zero Net Energy in Private New Buildings** - Adopt policies or programs to cause new buildings in the community to achieve near-zero net energy/fossil fuel-free performance.

#### **Consumption and Waste Reduction**

- **Organic Waste Management** - Implement organics (food waste, yard waste) collection in commercial, single-family, and multi-family properties, including food waste collection in high-volume locations.
- **Construction Waste Management** - Require recycling of construction and demolition waste.

- c. **Appointments Project.** The City of Lawrence is partnering with the [Appointments Project](#)®, a program launched by the Women's Foundation to help increase the diversity of public boards and commissions. An information session was held November 8, 2018 and about 35 women attended. Another session will be held in early 2018. Existing and upcoming vacancies on City of Lawrence

Boards and Commissions can always be found at <https://lawrenceks.org/board-vacancies/>

- d. **STAR Community Rating System.** The STAR community rating system was recently acquired by the US Green Building Council and is now known as LEED for Cities and Communities. Staff will be monitoring this transition closely to see how it will impact Lawrence's plan for recertification in 2020.
- VII. Key Takeaways: New Leadership elected for 2019. Policy research by KU students on single-use plastics is moving forward. The partnership between the city and the University of Kansas has been invaluable to making progress.
- VIII. Future Agenda Items
  - a. River access and dam repair
  - b. Bylaws update (January 2019)
- IX. Member Updates
  - a. Dale Nimz shared a resource: <https://www.strongtowns.org/>
- X. Public Comment: none
- XI. Adjourn 7:00 p.m.

**Next regular SAB meeting:**

December 12, 2018 at 5:30 p.m.

Venue: Parks and Recreation Administration Building in South Park, 1141 Massachusetts St, Lawrence, KS 66044



# Lawrence Energy Center





# Lawrence Energy Center

- Lawrence Energy Center, the third largest coal plant in Kansas, went into commercial operation in 1938. The plant has a capacity of 515 megawatts and generates enough energy to power 222,973 homes for one year.





## Lawrence Energy Center Generating Units

- L5 generates 82.3% and L4 generates 17.7% of our annual generation.

Unit	Gross Capacity MW	Auxiliary Power MW	Commercial Operation Year	Retirement Year
1	10		1938	1993
2	37.5		1952	2000
3	54		1955	2015
4	117	13	1960	
5	<u>398</u>	<u>28</u>	1971	
	515	41		





# Lawrence Energy Center Coal Supply

- 1.8M tons of coal burned in a year.
- Over 100 trains to deliver coal.
- At full load, a train load of coal will last about 2 days.
- Black Thunder coal mine, located in the Southern Powder River Basin of Wyoming.







# Lawrence Energy Center Coal Supply

- Rail Service by Burlington Northern Santa Fe.
- 869 Miles One-Way.
- Four train sets in-service.
- Average 8.1 Days Round Trip.
- Allowed 24 Hours to Unload a train.



# Lawrence Energy Center Air Emissions Trends

Lawrence is a plant with an exceptional history with respect to air quality controls.

- Unit 4 was retrofitted with a wet limestone scrubber for SO<sub>2</sub> removal in 1968 - the first in the nation.
- Unit 5 was the first unit in the nation to be equipped with such a scrubber as original in 1971.
- In 1987, Unit 5 became the first in the nation to be equipped with a low NO<sub>x</sub> burner and over-fired air system.

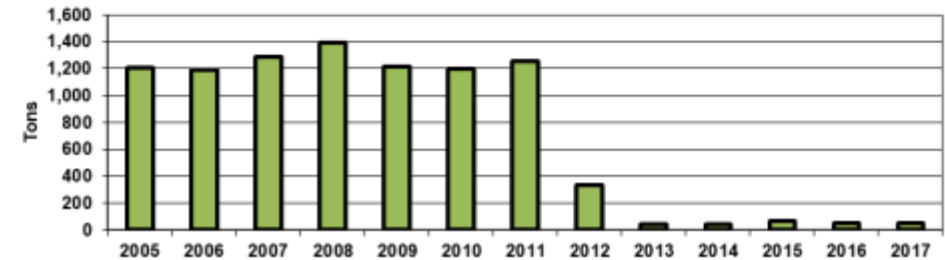
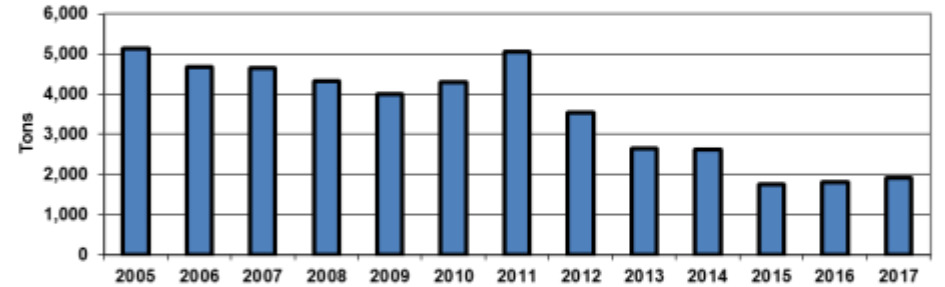
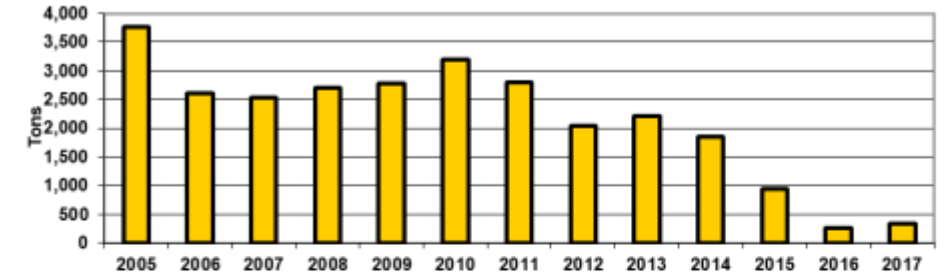
**Sulfur Dioxide**  
(tons)



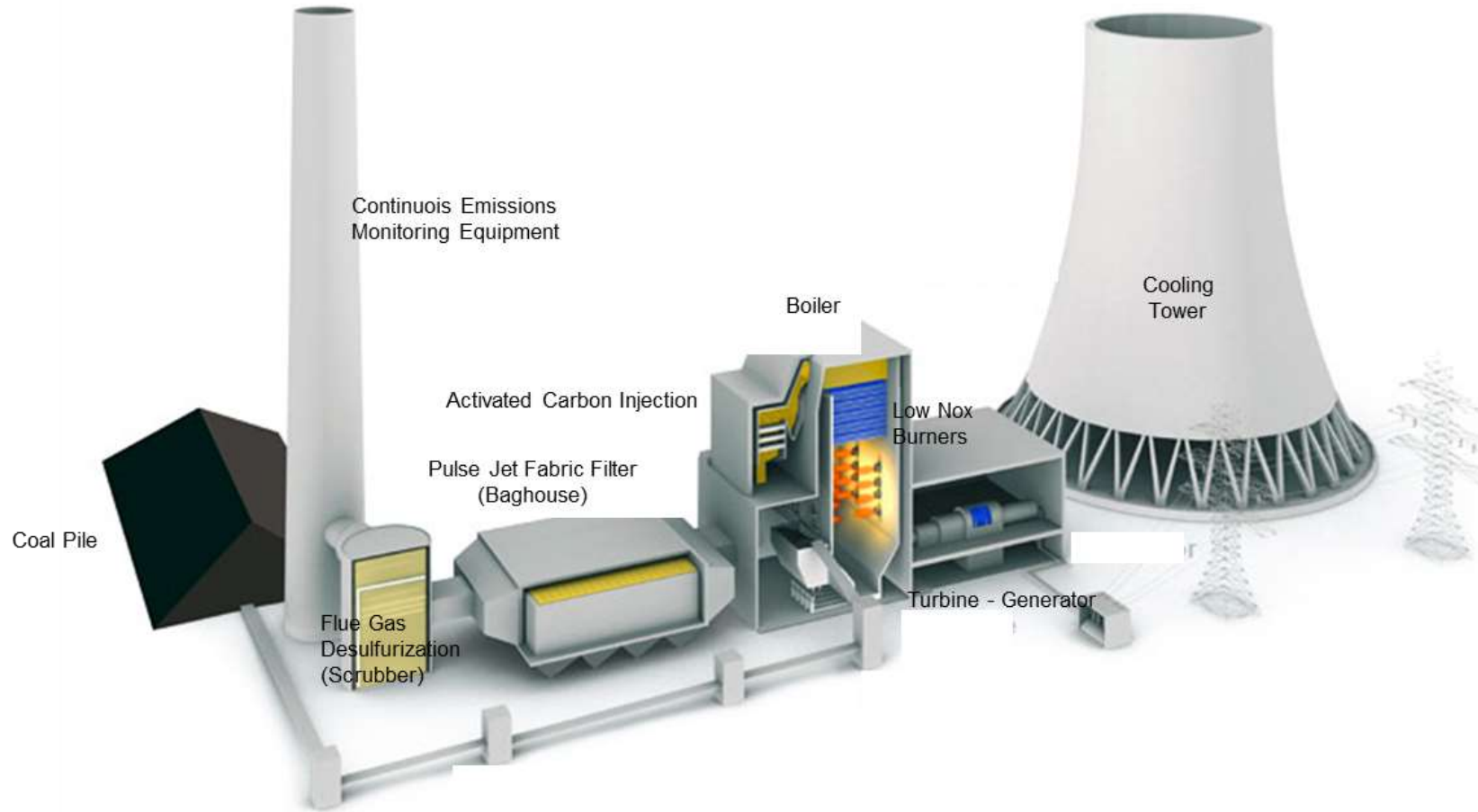
**Nitrogen Oxide**  
(tons)



**Particulate Matter**  
(tons)



# Clean coal fired power plant



Typical coal fired power plant arrangement

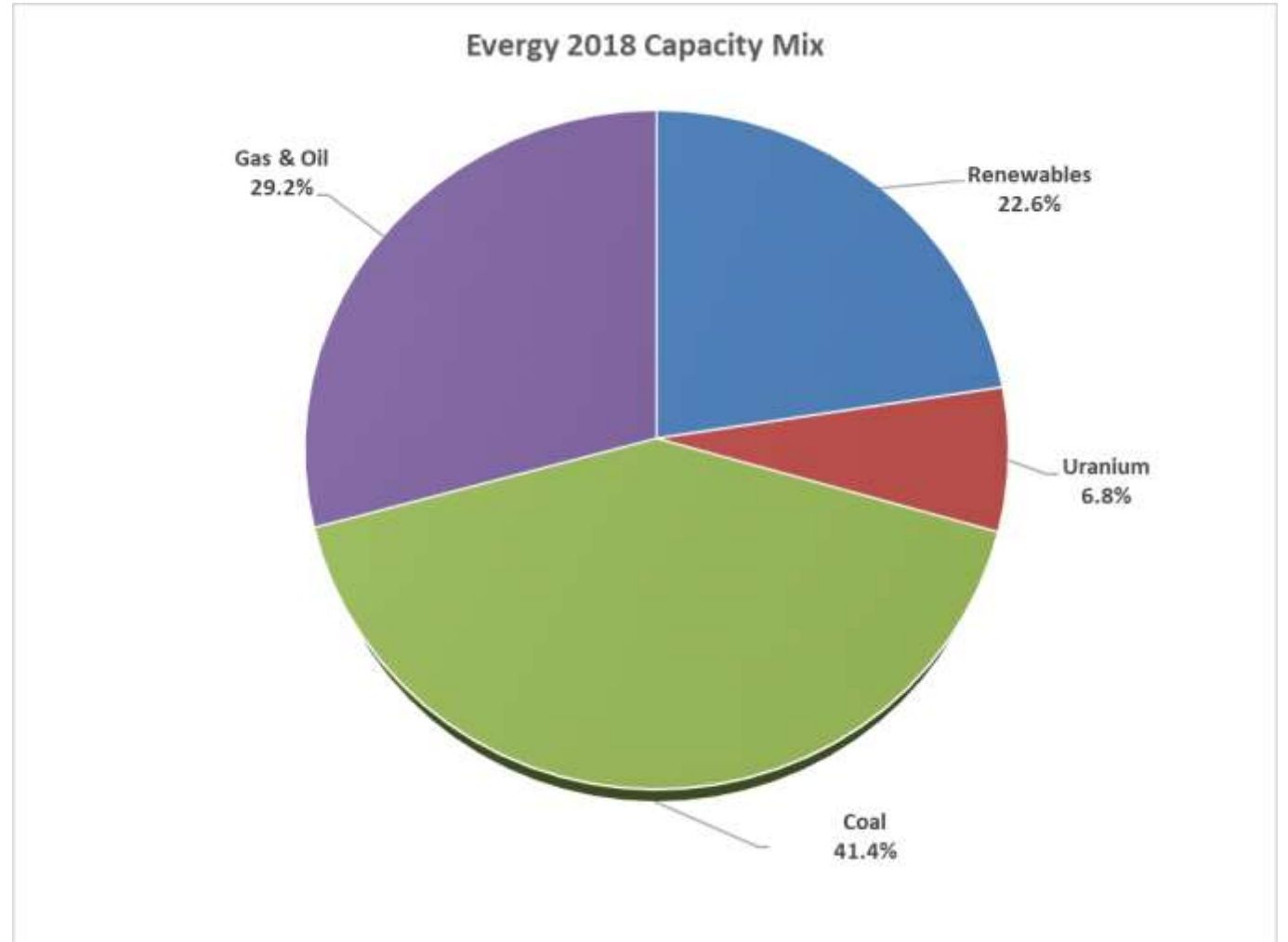


# Evergy Generating Fuel Types

## Capacity by Fuel Type

Renewables	3,646
Uranium	1,104
Coal	6,684
Gas & Oil	4,717
<b>Total</b>	<b>16,151</b>

Peak Responsibility 11,552







# Customers & Community

# Community Involvement

- Future City Judges
- Lawrence Free State High School Green Team Project
- Ronald McDonald House
- Lawrence Sertoma's Club





# Community Partners

## Lawrence Organizations

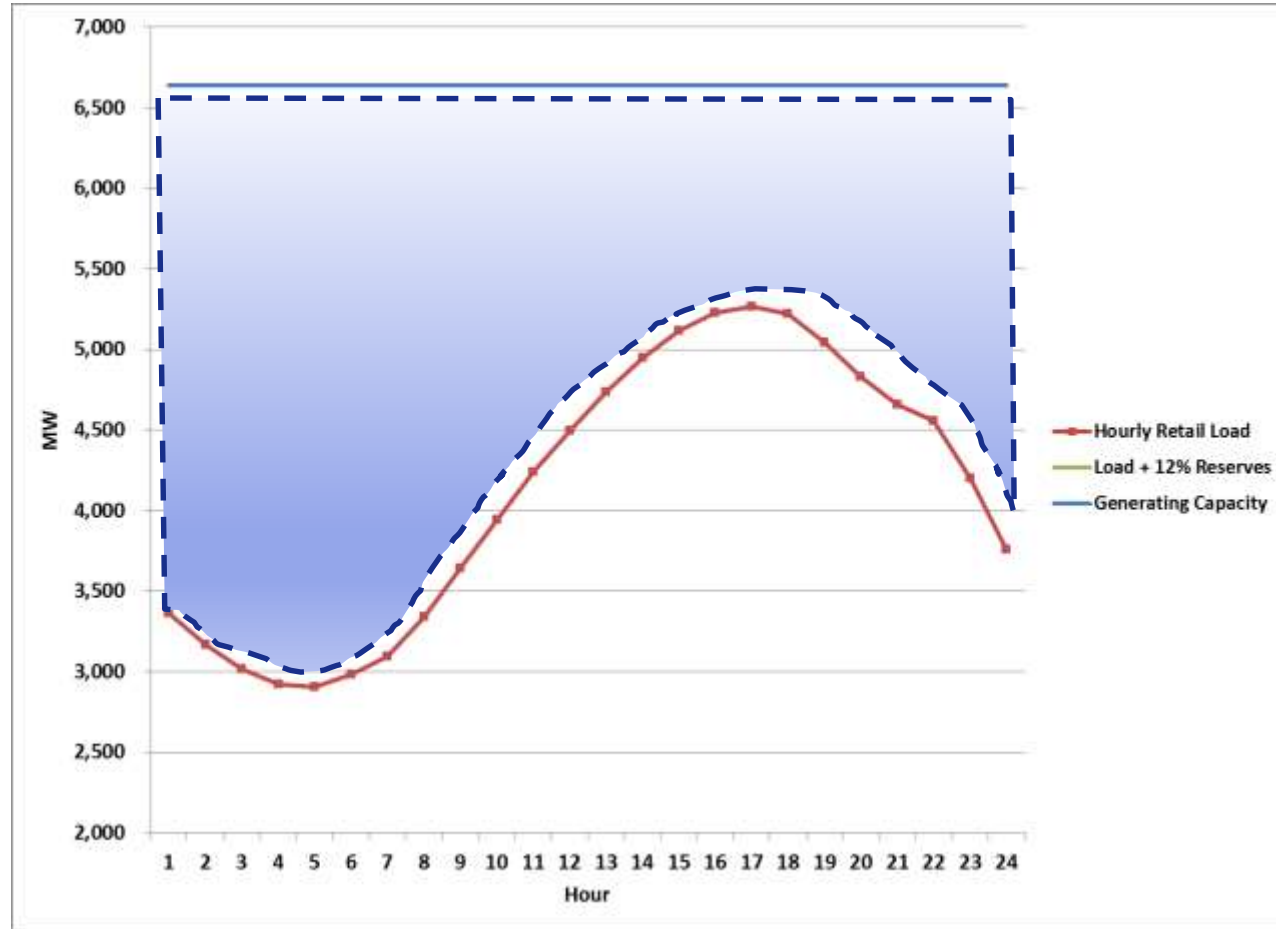
- Boys and Girls Club of Lawrence
- Friends of Hospice of Jefferson County
- Just Food
- Kansas Children's Service League
- Lawrence Community Shelter
- Lawrence Humane Society
- Project Deserve - Center of Hope
- United Way of Douglas County
- Van Go Mobile Arts
- Willow Domestic Violence Center







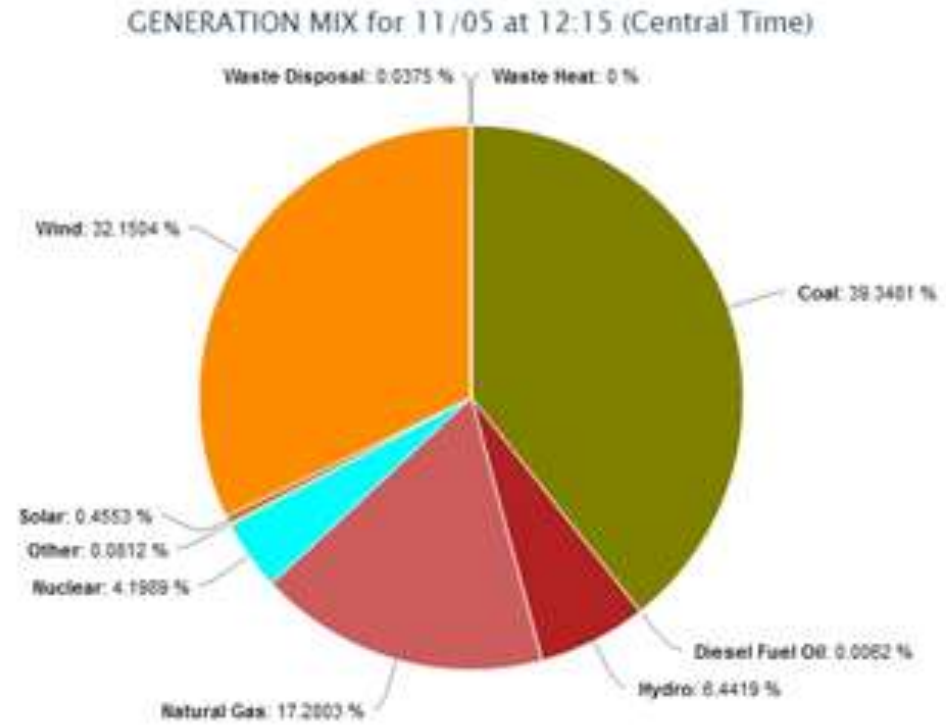
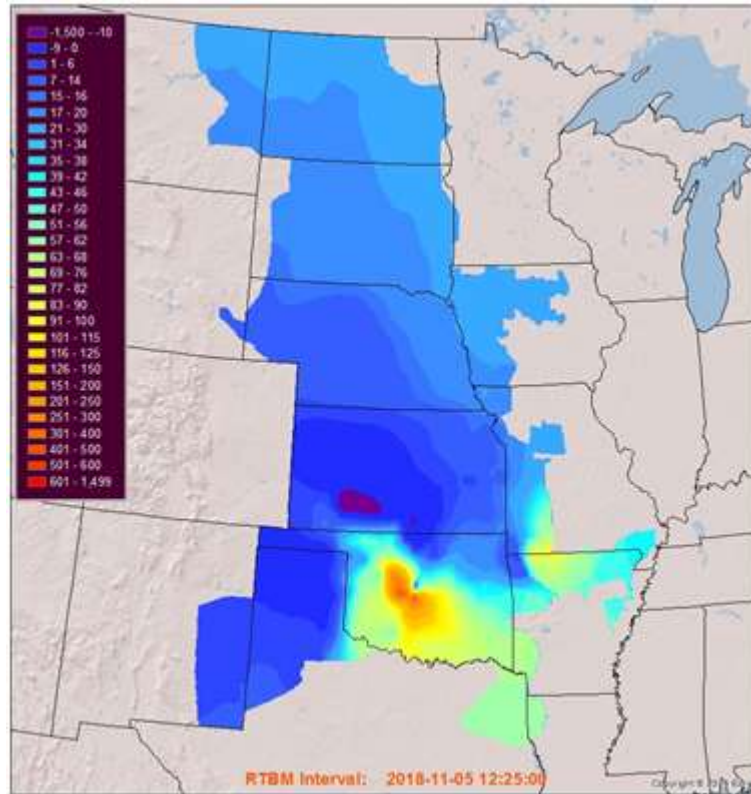
# Our summer peak load





# SPP, Southwest Power Pool

Regional power grid operator based in Little Rock Arkansas that ensures access to reliable and affordable electricity.





# Lawrence Energy Center