Utility Update

Rail Energy Transportation Advisory Committee

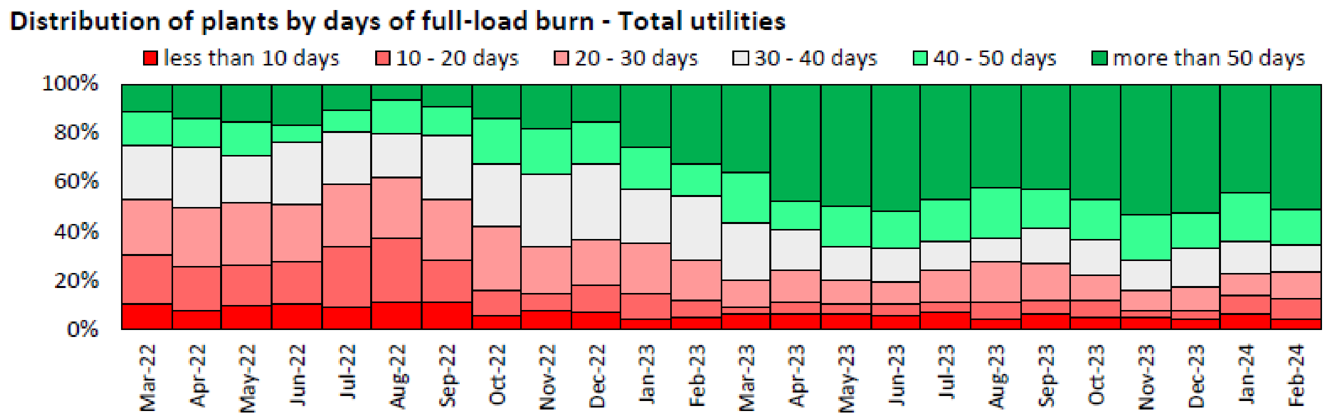
April 17, 2024

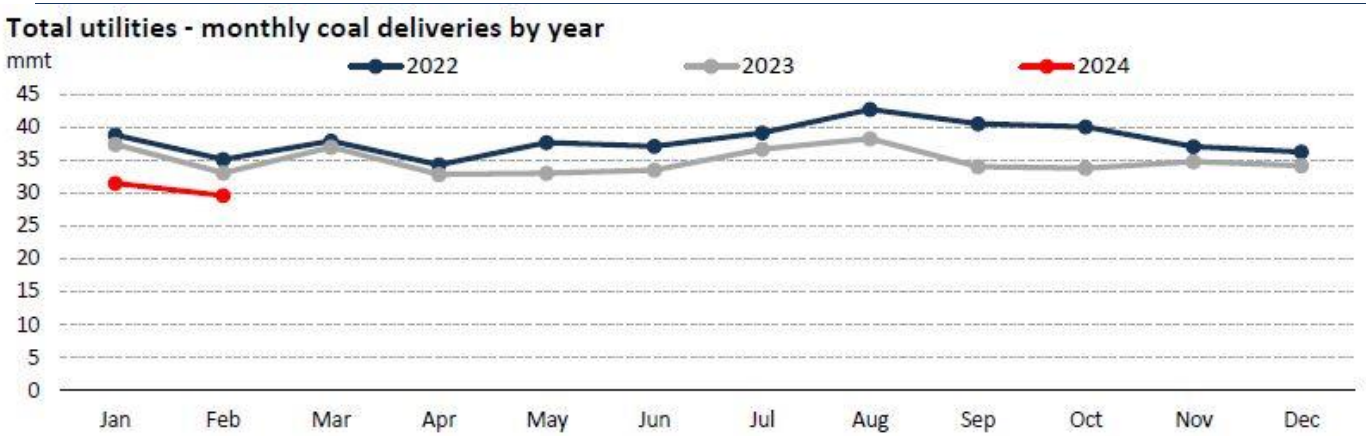
Utility Perspective

- Inventory Updates
- Rail Metrics
- On Time Performance Survey
- Key Takeaways / Asks

Inventory Updates

- Stockpiles levels remain healthy due to:
  - Mild winter weather
  - Low gas prices
  - Consistent railroad service



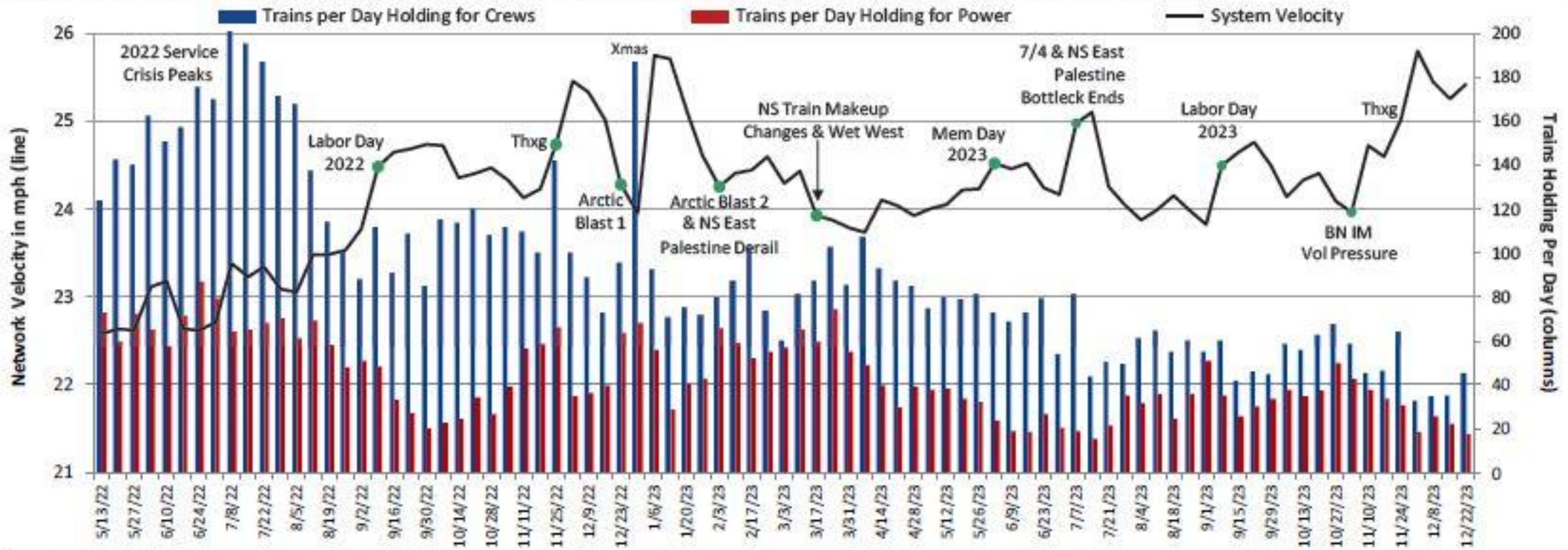


Rail Metrics

- Consolidated velocity and trains holding data is no longer available after December 2023 due to expiration of STB EP 770 rail service reporting requirements
- Continued reporting of the data by the Class 1's would be helpful as it provide an overall view of train holding data and velocity

US Network Velocity and Trains Holding for Crews and Power

Figure 1: US System Velocity (higher is better) and Trains per Day Holding for Power and Crews (lower is better)



Source: UP, BNSF, CSX, NS, CN-US, CPKC-US, and Loop Capital. Trains holding numbers are summations of the six railroad's totals while network velocity is a daily train starts-weighted average. For example, if railroad A does 15.1% of the total train starts in a given week its velocity is weighted 15.1%. CSX train starts are adjusted to be comparable with peers.

Rail Metrics

- This chart shows velocity and terminal dwell for Class I RRs only as a comparison to recession averages
- It continues to be available and is helpful with predicting Railroad performance

The State of the Rails

Running well/fast: CSX.

Running OK/normal: Canadian National, BNSF, Norfolk Southern, Union Pacific.

Running poorly/slow: Canadian Pacific KC.

Service Matrix: **Equally-weighted Velocity + Terminal Dwell versus each Railroad's Post-recession Average**

	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20
UP	-12%	-4%	-11%	-22%	-25%	-12%	-14%	PSR -2%	-7%	-3%	7%	13%	8%
BNSF	-5%	3%	9.6%	11%	5%	2%	-5%	-4%	-14%	-13%	-8%	0%	3%
CSX	-23%	-10%	PSR -33%	-14%	-6%	5%	17%	22%	31%	29%	29%	42%	42%
NS	4%	-5%	-3%	-14%	-33%	-35%	-22%	PSR -19%	7%	25%	29%	30%	32%
CN	6%	13%	3%	-19%	-45%	-16%	-15%	-14%	-28%	0%	-8%	-12%	-19%
CPKC	16%	38%	26%	17%	-3%	17%	15%	25%	-1%	26%	35%	33%	25%
KCS	-9%	-6%	-2%	-12%	-9%	-13%	-32%	-26%	-4%	PSR 0%	9%	15%	20%

	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22	4Q22	1Q23	2Q23	3Q23	4Q23	L3M
UP	21%	11%	15%	7%	9%	2%	1%	2%	-2%	-1%	-1%	2%	5%	2%	9.6%	8%
BNSF	18%	-7%	-2%	-11%	-10%	-8%	-9%	-20%	-17%	-5%	-4%	-17%	-12%	-6%	-4%	-9%
CSX	39%	23%	17%	14%	14%	11%	6%	-2%	-9.9%	-1%	20%	36%	33%	28%	27%	25%
NS	37%	25%	8%	-6%	-1%	4%	-26%	-26%	-30%	-18%	-11%	-15%	-31%	-2%	-9%	-3%
CN	-15%	-35%	-13%	-20%	-5%	-4%	-9%	-36%	1%	6%	1%	6%	8%	3%	6%	4%
CPKC	23%	23%	19%	4%	17%	12.2%	8%	-10%	7%	2%	-5%	-8%	-27%	-60%	-33%	-32%
KCS	20%	-1%	-13%	-22%	-21%	11%	20%	18%	1%	-3%	-7%	-21%				

CSX Adopts PSR
Hurricane Harvey

CN Capacity
Crunch

UP & NS Adopt
PSR

*Midwest
Flooding*

KCS Adopts
PSR

Record industry service,
aided by COVID-driven
lockdowns/freight drought

Polar
Vortex

COVID

NS Crew
Crunch.
BC Flooding

Omicron
Spike, Jan.

2022 Service
Crisis Peak

KCSM
Meltdown

Arctic
Blast

Yellow	**Railroad is turning assets *within* 10% of its post-recession average**
Green	**Railroad is turning assets >10% *faster* than its post-recession average**
Red	**Railroad is turning assets >10% *slower* than its post-recession average**

How does the chart work?

e.g. Velocity 10% better than its post-recession average + dwell 10% better than its post-recession average = 20%.
Velocity 10% worse + Dwell 10% worse = -20%.
Velocity 10% better + Dwell 10% worse = 0%.

Source: Company reports and Loop Capital Markets estimates.
Post-recession defined as Q1 2010 through the present.
L3M = Last 3 Months (last 13 weeks trailing average).

Loop Capital Feb 23, 2024 Industry Update

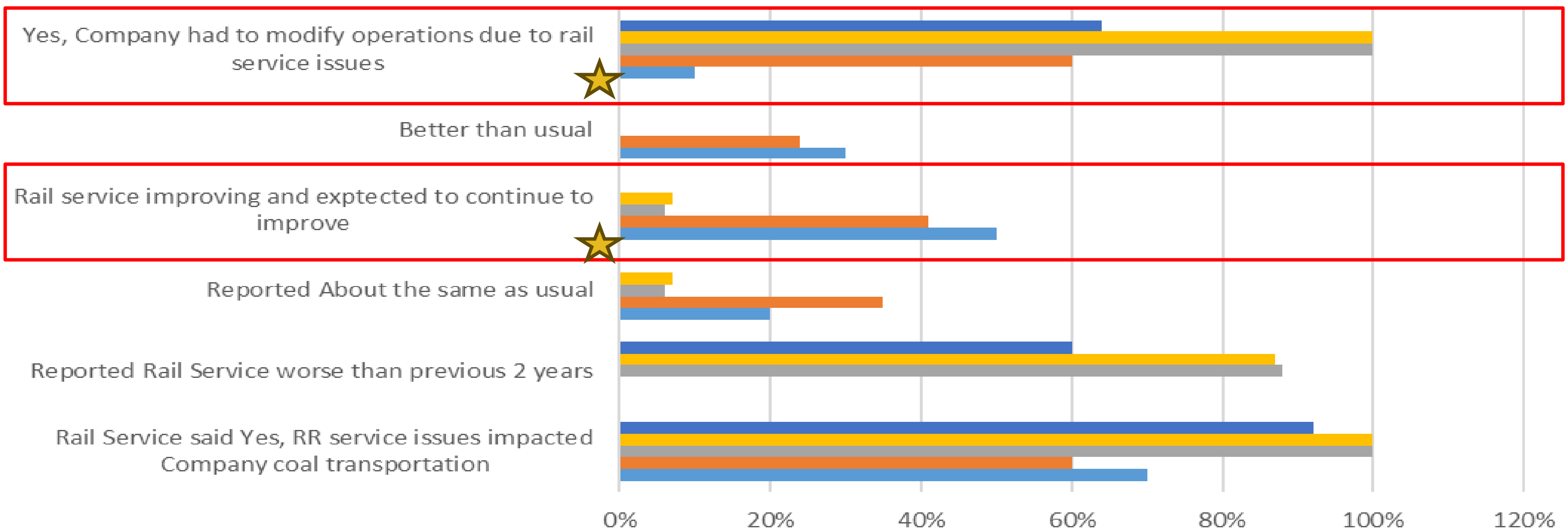
NCTA/FRCA/NRECA
On Time Performance Survey

- NCTA/FRCA/NRECA: OTP Survey Data Collected from Utility members since Aug 2019 to December 2023 per 6-month periods

- 18 Plants Reported Shipper Perspective Railroad Performance Data in latest survey for the period July 2023-December 2023 and some of the highlights are as follows:
  - 50% reported their company experienced improving rail service in the second half of 2023.
  - 20% said the service was about the same as usual
  - 30% said service was better than usual
  - 0% reported rail service worse than in the past 2 years

On Time Performance Survey

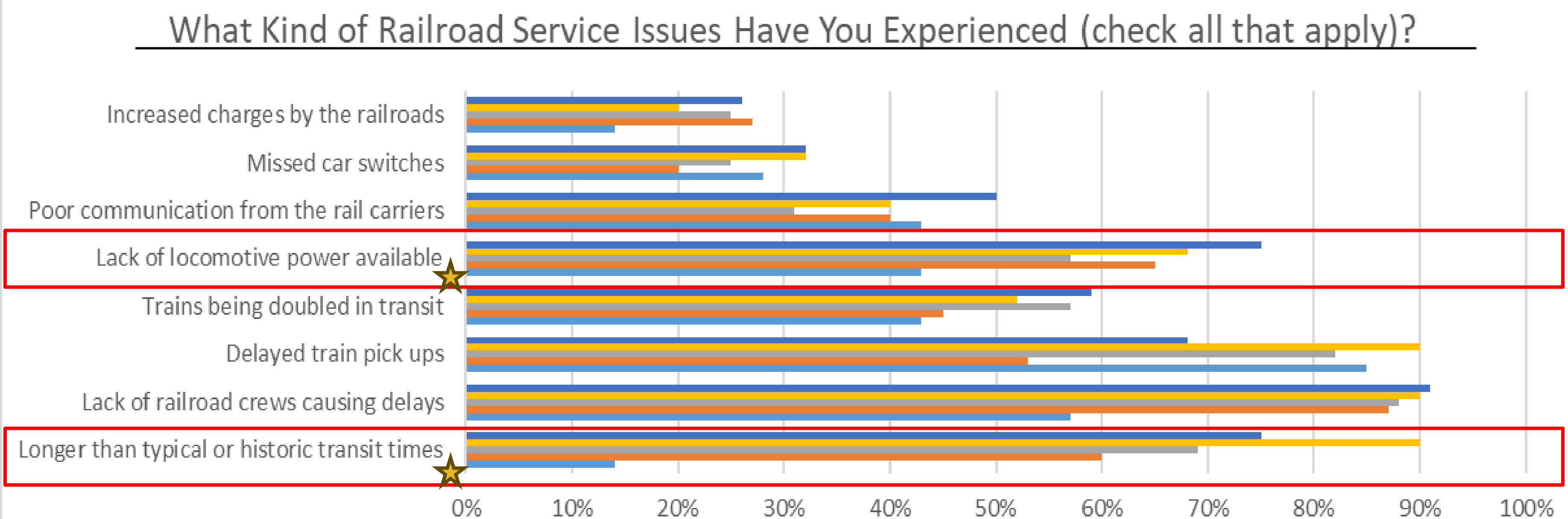
How Have Rail Service Issues Impacted Utility Coal Transportation



	Rail Service said Yes, RR service issues impacted Company coal transportation	Reported Rail Service worse than previous 2 years	Reported About the same as usual	Rail service improving and exptected to continue to improve	Better than usual	Yes, Company had to modify operations due to rail service issues
July 2021-Dec 2021	92%	60%	0%	0%	0%	64%
Jan 2022-June 2022	100%	87%	7%	7%	0%	100%
July 2022-Dec 2022	100%	88%	6%	6%	0%	100%
Jan 2023-June 2023	60%	0%	35%	41%	24%	60%
July 2023-Dec 2023	70%	0%	20%	50%	30%	10%

July 2021-Dec 2021 Jan 2022-June 2022 July 2022-Dec 2022 Jan 2023-June 2023 July 2023-Dec 2023

On Time Performance Survey



	Longer than typical or historic transit times	Lack of railroad crews causing delays	Delayed train pick ups	Trains being doubled in transit	Lack of locomotive power available	Poor communication from the rail carriers	Missed car switches	Increased charges by the railroads
July 2021-Dec 2021	75%	91%	68%	59%	75%	50%	32%	26%
Jan 2022-June 2022	90%	90%	90%	52%	68%	40%	32%	20%
July 2022-Dec 2022	69%	88%	82%	57%	57%	31%	25%	25%
Jan 2023-June 2023	60%	87%	53%	45%	65%	40%	20%	27%
July 2023-Dec 2023	14%	57%	85%	43%	43%	43%	28%	14%

July 2021-Dec 2021 Jan 2022-June 2022 July 2022-Dec 2022 Jan 2023-June 2023 July 2023-Dec 2023

Key Takeaways and Asks

- Utility forecasting for coal deliveries continues to be challenging for Utilities, Producers and Rail Carriers due to volatile market conditions
- The significant decrease in natural gas prices has curbed coal demand, offsetting the need for coal conservation at many utilities. Utility stockpiles have improved.
- Rail service has improved, but many utilities complain of inconsistencies in rail cycle times making it difficult to plan.
- Locomotive and crew availability continue to be a challenge at some locations despite the lower volumes the rail carriers are handling.
- Asks:
  - Updates on Railroad crew workforce/hiring and preparedness
  - Continued accountability and reporting service metrics from RRs

Questions / Discussion