

DOCKETED

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IEPR JOINT AGENCY WORKSHOP ON SUMMER 2021 ELECTRIC AND NATURAL GAS RELIABILITY



July 9, 2021



SoCalGas/SDG&E System Overview



21.8 MILLION
CUSTOMERS



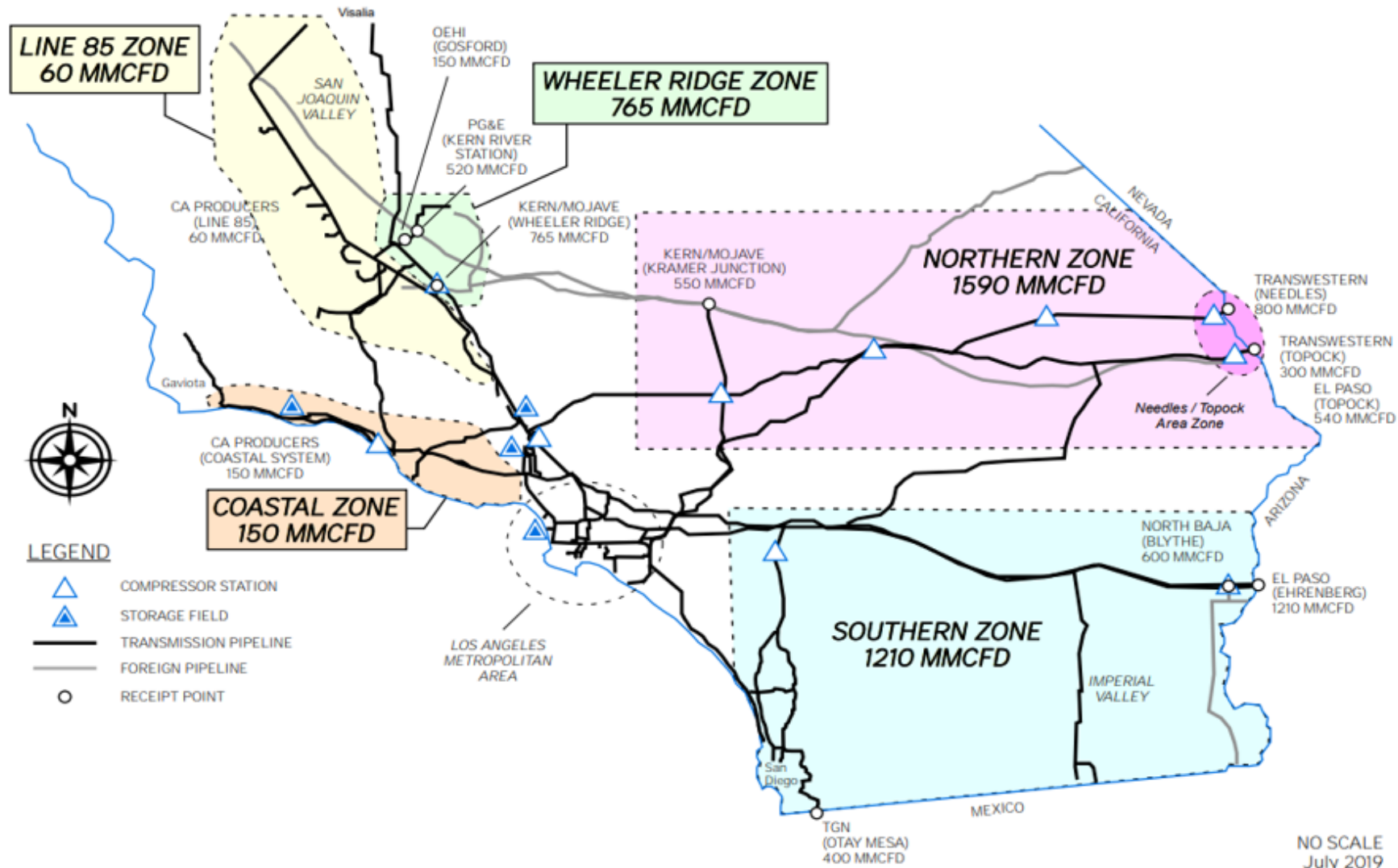
24,000
square miles
SERVICE TERRITORY



5.9
Million meters
IN MORE THAN 500
COMMUNITIES



RECEIPT POINT & TRANSMISSION ZONE FIRM CAPACITIES

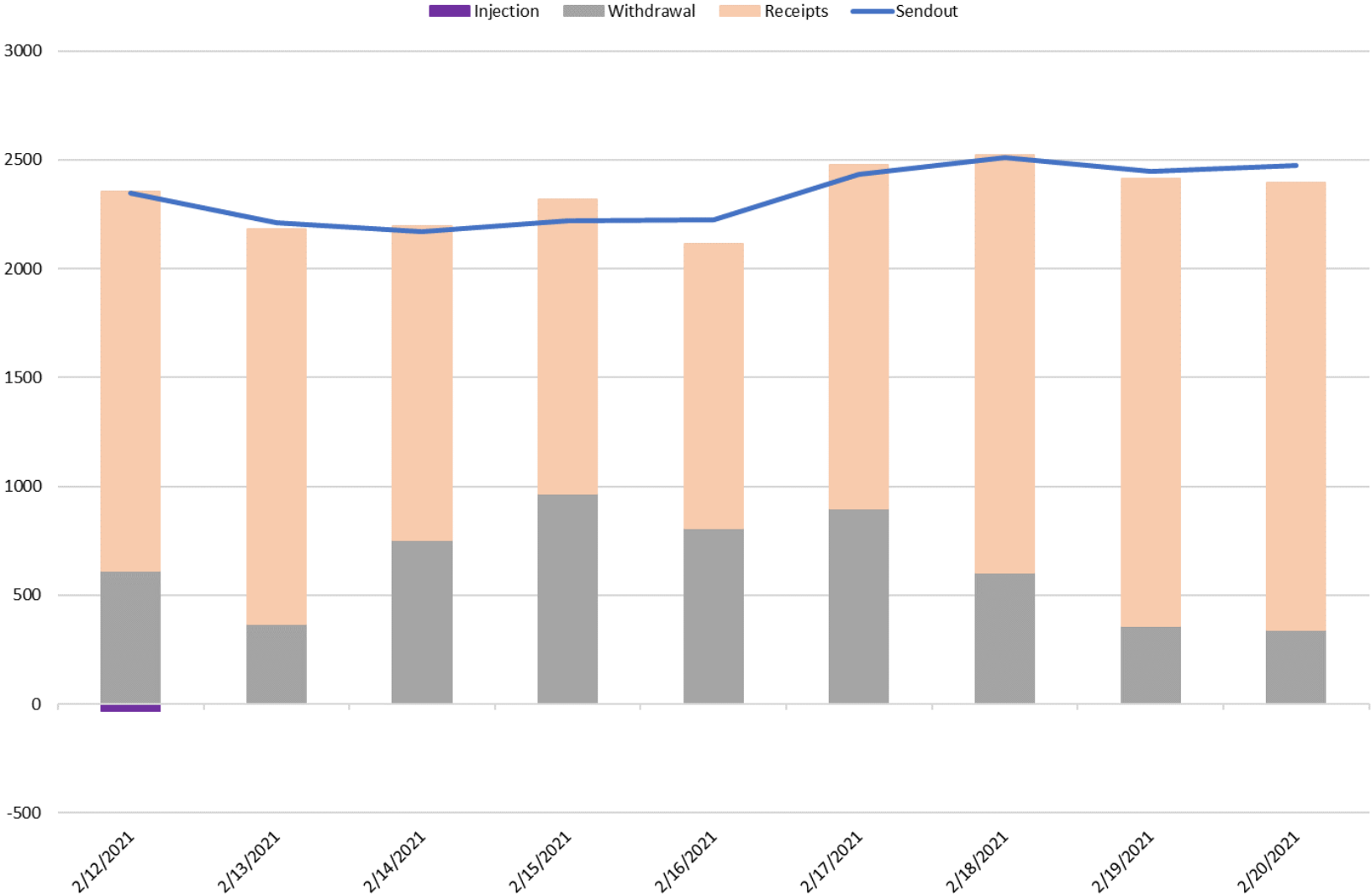


Winter Storm Uri

- » During February 13-18, 2021, Winter Storm Uri, a record Polar Vortex over much of the Midcontinent, severely impacted natural gas deliveries into the SoCalGas system.
- » While the demand on the SoCalGas system remained moderate, the ability to receive gas supply from the Permian Basin was limited due to well freeze-offs at interconnecting pipelines. With upstream supplies restricted by Winter Storm Uri, Receipt Point Utilization dropped to as low as 47% during the event.
- » In the Southern Zone particularly (which relies heavily on natural gas from the Permian Basin), there were under deliveries at the border. Meaning, gas was nominated and confirmed, but never scheduled and delivered to the system because of Winter Storm Uri-related upstream supply cuts.
- » February 14 – 19, 2021 SoCalGas and SDG&E issued a curtailment watch for the Southern System due to low supplies of natural gas.
- » Due to limited gas being made available at the border, the SoCalGas system was heavily reliant on storage withdrawals for support. Local storage resources again proved essential in guarding against potential systemwide curtailments stemming from upstream supply disruptions.
- » Aliso Canyon Withdrawal Protocol - Condition 1 was met throughout the duration of the event.

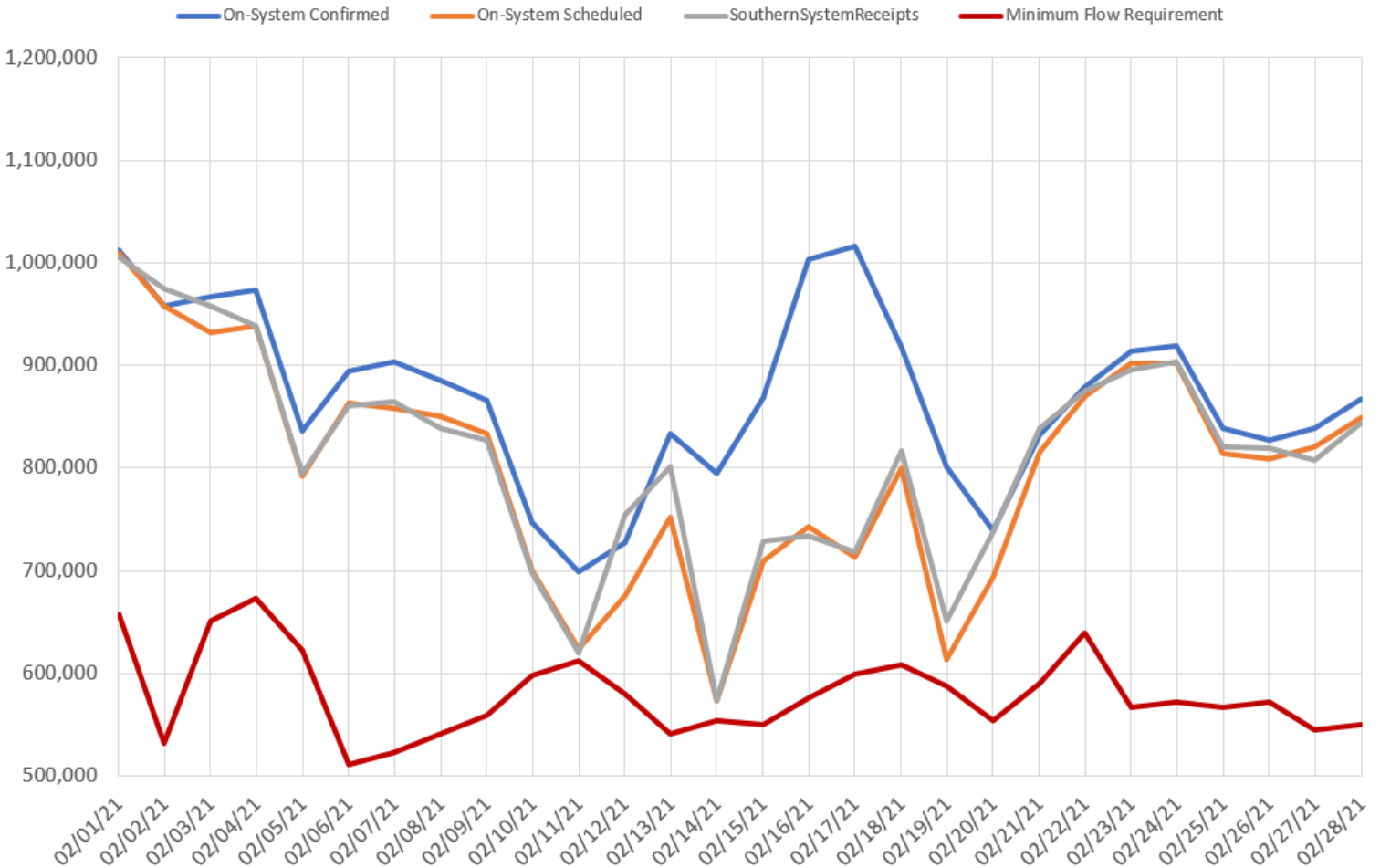
Winter Storm Uri

Presidents' Day Weekend 2021
Sendout, Receipts, Withdrawal, Injection (MMcf)



Winter Storm Uri

Southern Zone
Confirmed vs. Scheduled (Dth)
February 2021



Summer 2021 Outlook

- » SoCalGas has evaluated Best Case and Worst Case scenarios of system outages and impacts through the summer season.

Best Case: There is sufficient receipt capacity to fill storage inventory for the upcoming winter season and meet forecast peak day demand without the use of Aliso Canyon.

Worst Case: There is insufficient receipt capacity to both serve summer customer demand and fill storage; able to meet forecast peak day demand without use of Aliso Canyon.

Summer 2021 Scenario Evaluation

Assumes the Following Existing Conditions (as of April 2021)

- Line 4000 expected to remain out of service through September for remediation.
- Line 5000 Inline Inspection planned for July.

Best Case Scenario (assumptions)

- Line 4000 is returned to service in October.
- Line 2001 is unavailable for 1 week in May due to pipeline maintenance.
- Line 5000 is unavailable for 1 week in July due to the Inline Inspection.
- Some gas supply is available at the Otay Mesa receipt point reflecting historical performance.

Worst Case Scenario (assumptions)

- Line 4000 is unavailable for the entire season.
- Line 2001 is unavailable for the month of May.
- ILI complications cause Line 5000 outage for the month of July. Inspection results received in October render the pipeline unavailable again.
- No gas supply available at Otay Mesa due to competing demand in Mexico.

Summer 2021 Supply & “Peak” Demand Forecast

	“Best Case” Supply (Bcfd)	“Worst Case” Supply (Bcfd)
Total Pipeline Receipts	2.835	2.685
Assumed Utilization	85%	90%
Assumed Supply	2.420	2.424

- » SoCalGas Receipt Capacity During Peak Summer Demand.
- » The differences between the “Best Case” and “Worst Case” are 1) the Assumed Percent Utilization and 2) 150 MMcfd of supply from Otay Mesa under a “Best Case” scenario.

Customer Type	Summer Demand (Bcfd)
Core	0.776
Noncore, Non-Electric Generation	0.770
Noncore Electric Generation (EG)	1.718
Total	3.264

- » Core summer demand reflects average core summer demand.
- » EG summer demand reflects the 2020 California Gas Report (CGR) Summer 2021 forecast.



Maintaining Summer Energy Reliability

- » SoCalGas will continue to coordinate operations with electric grid operators.
- » Maintenance will continue to be scheduled during periods of anticipated low demand except for identified safety issues or regulatory requirements.
- » SoCalGas will use Operational Flow Orders (OFOs), withdrawals from Aliso Canyon consistent with the Aliso Canyon Withdrawal Protocol to maintain service, and curtailments when required to maintain service to higher priority customers.
- » OFOs are declared to help keep the system in balance by providing noncompliance charges that incentivize customers to balance their deliveries and use of gas.
- » High and Low OFOs are important safety and reliability tools.

Maintaining Summer Energy Reliability

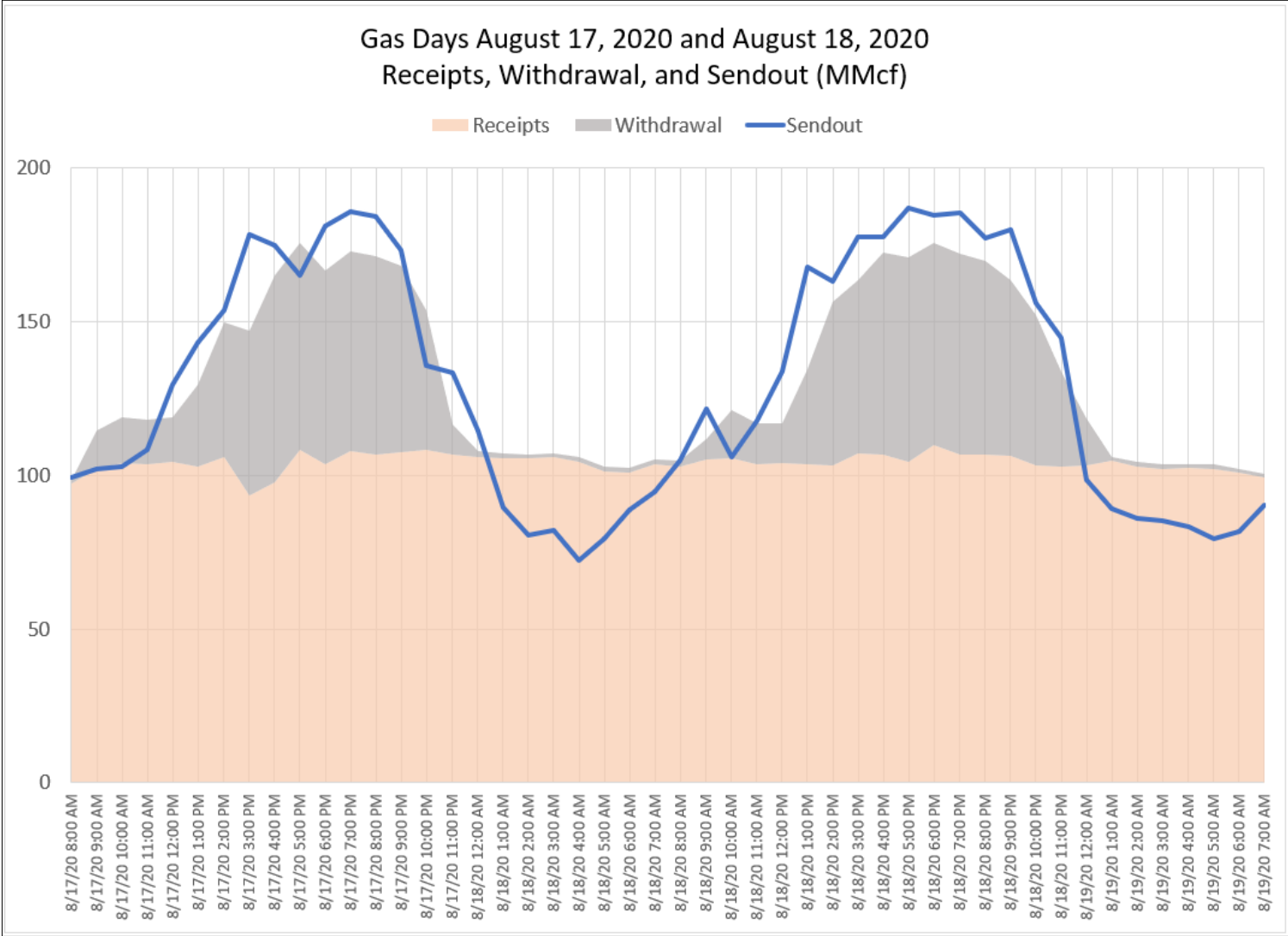
- » SoCalGas' storage fields are important system tools:
 - Storage field withdrawals help meet peak demand conditions and provide additional supply when system demand exceeds supply.
 - Storage field injections help provide system flexibility by allowing gas to be injected when supply exceeds demand.

- » In 2019, the CPUC issued a revised Aliso Canyon Withdrawal Protocol (ACWP), which allows Aliso Canyon withdrawals: “to reduce system stress, preserve the inventory levels of the non-Aliso fields, and reduce the price spikes that can occur as a result of limited gas supply and high customer demand.” (Winter 2019-20 SoCalGas Conditions and Operations Report)

- » The revised ACWP has led to more stable gas and electricity prices, reduced the need for operational flow orders, and helped support system reliability. (Winter 2019-20 SoCalGas Conditions and Operations Report)

- » As evidenced during last year's August heat wave, storage withdrawals can be instrumental in meeting growing peak demand.

Peak 2020 Summer Days, Lookback



Storage Field Inventory

- » Storage field withdrawal capability is an important factor in meeting peak demand. Withdrawal levels are a factor of storage facility inventory, which is why inventory must be closely watched and managed throughout the year.

Aliso Canyon (Bcf)	Honor Rancho (Bcf)	La Goleta (Bcf)	Playa del Rey (Bcf)
31.6	24.9	19.5	1.6

- » Once a storage field is full, that field's injection capacity will no longer be available, and system capacity will be reduced which can cause more High Operational Flow Orders to be issued with much tighter balancing tolerances.