

Limited Generation Profile Workshop #3

Resolution E-5211

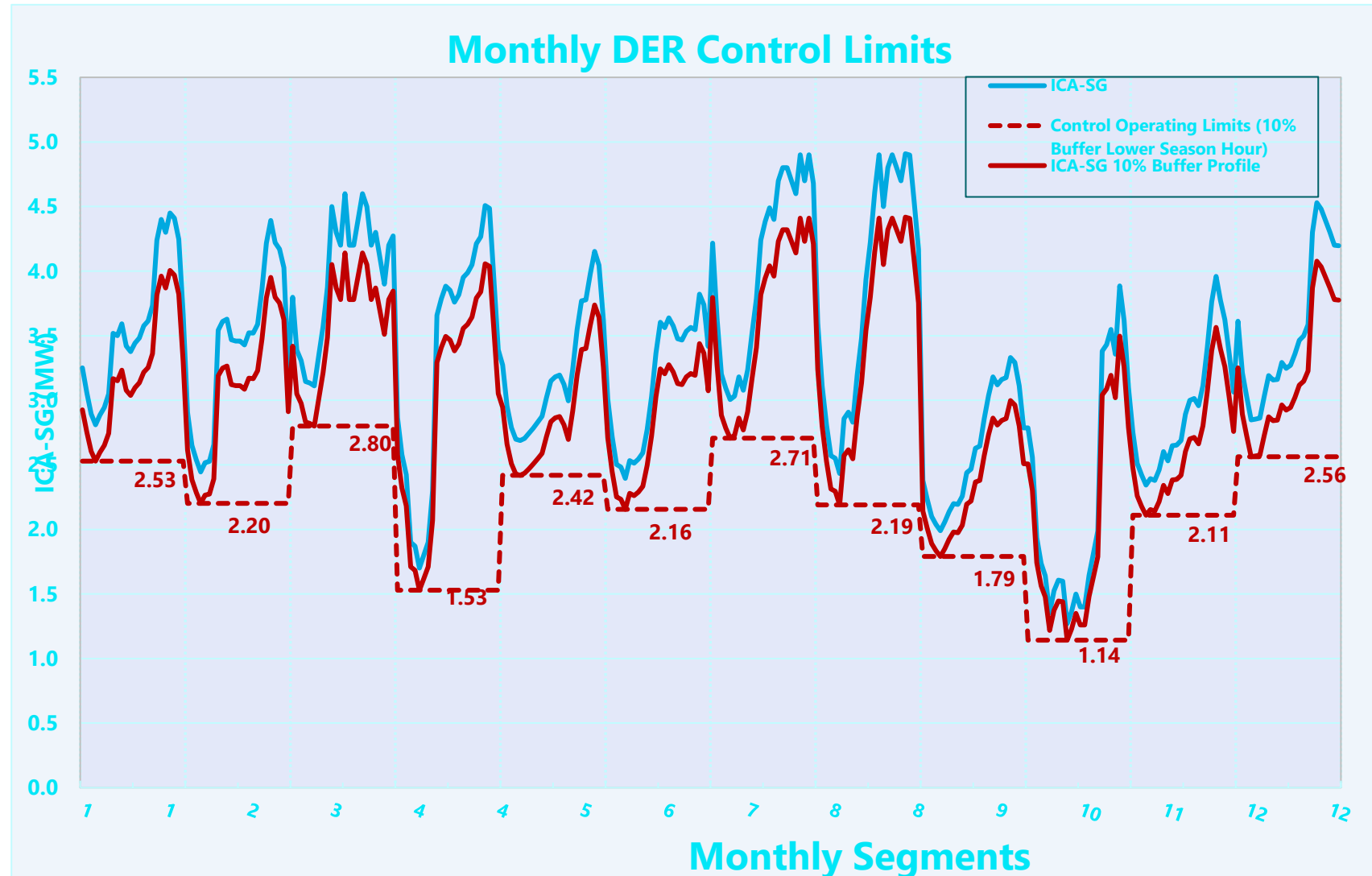
(Phase I)

December 16th , 2022

ICA Limited Generation Project (LGP) Example

(Note: LGP Schedules to be discussed in future Resolution E-5230 Workshops)

Month	Max Monthly Operating Limits (MW)
Jan	2.53
Feb	2.20
Mar (max ICA-SG)	2.80
Apr	1.53
May	2.42
Jun	2.16
Jul	2.71
Aug	2.19
Sept	1.79
Oct (lowest ICA-SG)	1.14
Nov	2.11
Dec	2.56



Decision 20-09-035 resolving issue 9 states "We reiterate that profile reductions may only be allowed for safety and reliability reasons. Furthermore, retroactive alterations to generation profiles shall not reduce generation to below a pre-defined static level, i.e., the lowest Integrated Capacity Analysis – Static Grid typical profile value identified at the time of the Interconnection Application."



Reductions to LGP Under Emergency/Planned Outages

Decision 20-09-035 allows curtailment of generation profiles below lowest ICA-SG for "extra-ordinary circumstances."

System Condition	Triggering Event	Operators Initial Action	LGP Project Profile	Reduction	Stakeholder/IOU Stance (IOUs believe there is consensus)
Emergency or planned outage that results in, or creates the possibility of, violation of acceptable distribution system voltage and/or equipment thermal limits.	Fault condition or planned outage/maintenance	LGP and non-LGP Customer would need to curtail until further notified by IOU. Reduction would only last for the duration of the emergency or planned outage (i.e., until IOU provides customer notification that it may resume normal operations)	LGP/non-LGP would be disconnected to zero.	<ul style="list-style-type: none"> LGP and non-LGP projects would be treated equally. Output could be curtailed to zero. Controlable projects could be curtailed to a non-zero level depending on event. If catastrophic conditions arise (i.e. earthquake, wildfire etc.) curtailment could be weeks to months. 	<ul style="list-style-type: none"> Stakeholders agree with IOUs that under emergency conditions or for planned outages, curtailment of LGP and non-LGP could occur.

IOUs' Consensus Proposal: Decision allows indefinite curtailment to lowest ICA-SG

IOUs' position is that Decision 20-09-035 allows curtailment and does not limit the duration

System Condition	Triggering Event	Operators Initial Action	LGP Project Profile	Permanency of Reduction*	Stakeholder Stance
Output of the LGP project or non LGP project is contributing to overload and/or voltage violation thereby resulting in reduction of hosting capacity on a given circuit/area where LGP project or non-LGP project is connected.	Load disappears from a given circuit <ul style="list-style-type: none"> • Business wind-down • Customers implement load management technologies 	To restore/maintain safe and reliable grid condition, Utility Operators will <ul style="list-style-type: none"> • perform initial actions <ul style="list-style-type: none"> • e.g., adjust voltage/LTC regulator • direct reduction in LGP and non-LGP exports, or • direct shut-down of LGP and non-LGP generation • consider other mitigation measures <ul style="list-style-type: none"> • e.g., transfer load to circuit • circuit reconfiguration 	To maintain grid reliability/safety and restore some level of LGP exports, study the reduction of LGP generation profile, potentially to the lowest ICA-SG amount	New LGP profile could be temporary (if mitigation does not require an upgrade), or it could be permanent.	Concerns regarding duration and magnitude of reduction
			Reduction of LGP generation profile <u>below</u> the lowest ICA-SG level may be required to maintain grid reliability/safety.	Since, Decision does not allow LGP projects be reduced below the lowest ICA-SG, IOUs will build upgrades at ratepayer expense to restore profile to at least the lowest ICA-SG level.	Ratepayer-funded upgrades should restore profile to project's original contractual profile, not just to the lowest ICA-SG level.

* Operators will take emergency action. IOUs anticipate that within 30 calendar days operators will communicate new reduced value. Note that there is no provision allowing reduction of non-LGP project output and therefore utilities will perform mitigation sufficient to restore output of original interconnection agreement.

Stakeholder's Consensus Proposal: Decision does not allow indefinite curtailment to lowest ICA-SG

Stakeholder Position: Ratepayers pay for upgrades

System Condition	Triggering Event	Operators Initial Action	LGP Project Profile	Permanency of Reduction*	Utility Stance
Output of the LGP project or non LGP project is contributing to overload and/or voltage violation thereby resulting in reduction of hosting capacity on a given circuit/area where LGP project or non-LGP project is connected.	Load disappears from a given circuit: <ul style="list-style-type: none"> • Business wind-down • Customers implement load management technologies • Customers add BTM generation 	To restore/maintain safe and reliable grid condition, Utility Operators will perform initial actions <ul style="list-style-type: none"> • e.g., adjust voltage/LTC regulat or • direct reduction in LGP and non-LGP exports, or • direct shut-down of LGP and non-LGP generation • consider other mitigation measures <ul style="list-style-type: none"> • e.g., transfer load to circuit • circuit reconfiguration 	To maintain grid reliability/safety and restore some level of LGP exports, study the reduction of LGP generation profile, potentially to the lowest ICA-SG amount Utility Operators will work with LGP project to temporarily reduce exports until upgrade is installed.	IOUs will upgrade the circuit at ratepayer's expense to mitigate overload or voltage violation, thereby restoring LGP project's original contractual profile.	IOUs do not have Commission authorization to recover costs for upgrades that restore LGP project's original contractual profile.

Summary of IOU and Stakeholder Positions

Consensus Proposals	IOUs' Position	Stakeholders' Position*
<p>IOUs: Decision 20-09-035 allows indefinite reductions to initially-established LGP to maintain grid reliability/safety. The Decision does not authorize ratepayers to pay for upgrades that restore LGP to initially-established levels.</p> <p>(Note: Ratemaking is to be considered in Phase II)</p> <p>Stakeholders: – Ratepayers pay for upgrades that restore LGP to initially-established levels</p> <p>(Note: Ratemaking is to be considered in Phase II)</p>	<ul style="list-style-type: none"> • LGP projects are benefiting from hosting capacity, the cost of which is borne by ratepayers • Supports DER goals while minimizing the need for, and ratepayer cost of, system upgrades • Possibility of curtailing exports is low and appropriate for LGP projects • Upgrades that minimize the possibility of LGP export curtailments, are funded by ratepayers, but the associated commercial benefits accrue to the LGP customer • LGP customers always have the right to pay for circuit upgrades if they choose. 	<ul style="list-style-type: none"> • The possibility of export curtailments (outside of immediate emergency conditions) creates unacceptable commercial risk • Unacceptable commercial risk renders the LGP option useless • Ratepayers should bear the costs of upgrades because doing so reduces financial risk to a level that will support DER investment under the LGP option, thereby supporting the addition of DERs and the achievement of state policy goals

* Utilities' takeaway of stakeholders' positions during workshop #1 and #2.

Proposed DRAFT Tariff Language for IOU Consensus Proposal

Rule 21, Section D.9 Curtailment and Disconnection (proposed language is highlighted in yellow)

9.1 – Curtailment Provisions for Limited Generation Profile Projects

For Generating Facilities approved to utilize Limited Generation Profiles, Producer acknowledges that future grid conditions could result in actual hosting capacity being below the published ICA-SG value identified at the time of the Interconnection Application and that Distribution Provider may need to reduce generation to ensure safe and reliable service. Accordingly, if necessary to maintain safe and reliable operation of Distribution Provider's Distribution or Transmission System, Distribution Provider may reduce the approved Limited Generation Profile level to the lowest ICA-SG value identified at the time of the Interconnection Application. This reduction could be temporary or permanent.

If the Distribution Provider must limit the operation of a Producer's Generating Facility to a level that is below the lowest ICA-SG value in effect at the time of the Interconnection Application to maintain safe and reliable operation of Distribution Provider's Distribution or Transmission System, then Distribution Provider shall implement measures – in accordance with utilities practices for design and construction – to restore operation of Producer's Generating Facility to, at a minimum, the lowest ICA-SG value identified at the time of the Interconnection Application.

Questions?

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