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# **Wellhead Electric Co. Inc.**

## **Fast Flex RA Proposal**

**February 23, 2018**

# Fast Flex RA – Regulatory Backdrop

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## Integrated Resource Plan (“IRP”)

- Embodies California’s GHG reduction policy objectives, 2030, 42 MMT case selected
- Doesn’t dive deep enough to determine which natural gas resources are desirable for continuing to be in the resource mix in 2030
- Excerpts from the IRP Section 15.2 “Natural Gas Fleet Impacts”

plants, or plant attributes, that are most desirable and most needed for reliability. Further work was also identified as needed on how to design procurement or contractual

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mechanisms to support sustaining the desirable natural gas plants and characteristics in the near and medium term to support attainment of the 2030 GHG target sector wide at least cost while maintaining reliability.

- Note that “further work” is required

# Fast Flex RA – Regulatory Backdrop, cont.

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## Integrated Resource Plan (“IRP”)

- Further excerpt from the IRP Section 15.2 “Natural Gas Fleet Impacts”

### **15.2.3. Discussion**

We agree with staff and numerous parties that this is an important policy area for further work. At this stage, we are not offering specific direction for a particular study on natural gas fleet issues, but will direct staff to continue to work with the CAISO to study the most important attributes of the natural gas fleet and work in coordination with the resource adequacy proceeding activities. Any further examination of these issues will be with sensitivity to the location-specific aspects of natural gas generation, including impacts on disadvantaged communities and air quality implications.

- Note the intent to address these matters during the RA proceeding activities.

# Fast Flex RA – Regulatory Backdrop, cont.

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## CAISO “ELECTRICITY 2030”

- Trend 2: Gas-Fired generation declines significantly as the grid is modernized
  - **The gas generation fleet is modernized.** Older gas generation is retired, retrofitted or replaced with resources that start and ramp quickly and can operate at very low loadings. **Flexible gas units are incentivized to provide essential services.** Gas fleet modernization reduces renewables oversupply conditions and curtailment risk.
  - **A managed process phases-out gas generation.** **An exit strategy and phase-out timeline for gas generation retires the least flexible resources first,** and minimizes risk of newer, more valuable fossil assets becoming stranded. **Incentives for early retirement, upgrades or replacement with non-fossil technologies** help manage phase out of the fossil units. Multi-year Integrated Resource Planning guides the managed phase-out process.
- Note the CAISO’s awareness of the need to provide incentives

# Fast Flex RA – Regulatory Backdrop, cont.

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## CAISO “ELECTRICITY 2030”

- Trend 2: Gas-Fired generation declines significantly as the grid is modernized
- **The wholesale energy market ensures financial viability of gas-fired generators that remain necessary. Appropriate pricing of non-energy Essential Reliability Services and removal of price caps help gas-fired generators that operate only a small number of hours to remain financially viable.**
- Note the specific statement that the removal of price caps is a tool to keep around the right resources with the right attributes

# Fast Flex RA – Regulatory Backdrop, cont.

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## CAISO FRACMOO 2

- The CAISO's FRACMOO 2 Executive Summary identifies the following:

variable and distributed energy resources. The ISO's assessment of the current flexible capacity product shows that it is overly inclusive, and risks exacerbating the ISO's operational challenges by sustaining largely inflexible resources (long starting, long minimum run times, and high Pmins) at the expense and financial viability of more flexible resources.

- We think this is a nice summary of the problem statement and our proposal is geared to solving this problem, while keeping in mind the regulatory perspectives of the previous slides.

# Fast Flex RA – Proposal Overview

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## A few preliminary comments –

1. Our proposal is intended to convey a long term (through 2030) concept for Flex RA structuring.
2. We have made no attempt to develop a complete plan that considers every detail, but we would like to be involved in a working group that does.
3. Precise details should be worked out throughout Track 1 or Track 2, and put in place for long term use.
4. Precise details shown in our proposal are for demonstration purposes only and intended to be thought provoking.
5. We welcome the comments of other Stakeholders.

# Fast Flex RA – Proposal Overview

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## Fast Flex RA defined –

1. Fast Flex RA would be a new product, a subset of overall Flex RA
2. Would have eligibility requirements:
  - A resource must achieve its P<sub>MAX</sub> from a non-generating condition in fifteen (15) minutes or less.
  - Minimum ramps to P<sub>MAX</sub> per day – two (2).
  - Minimum uptimes – not longer than thirty (30) minutes.
  - Sustained operations at P<sub>MAX</sub> – duration of at least four (4) hours.
  - The ability to return to a non-generating condition in 15 minutes or less.
3. By using these eligibility requirements, the discussion about flexibility does not have to be resource specific.



# Fast Flex RA – Proposal Overview

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## Fast Flex RA, examples –

Examples of eligible resources could include, but not be limited to:

- Battery Storage
- Hydro
- 10-minute start enabled gas-fired units (peakers)
- Storage enable demand response
- Hybrid Energy Storage

# Fast Flex RA – Proposal Overview

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## Fast Flex RA Procurement Requirements -

- Initially LSE's would have to procure a set percentage of total Flex RA. Our proposal said 10% but it could be more or less.
- Each year the Fast Flex RA percentage of Flex RA would go up until 2030. A necessary element to promote transition of the inflexible fleet to being more flexible.
- Our proposal does not conflict with the CAISO's FRACMOO initiative. It augments the CAISO's FRACMOO initiative.

# Fast Flex RA – Proposal Overview

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## Pricing of Fast Flex RA -

1. CAISO's CPM backstop to be maintained for non-Fast Flex RA.

- Pricing cap to be maintained.
- Specific pricing to be determined. Our proposal said \$40/kw-yr as a placeholder and thought stimulator.

2. Fast Flex RA would have a price floor and no price cap.

- Our proposal said \$50/kw-yr price floor as a placeholder and thought stimulator.

3. The pricing structure would properly compensate flexible resources and provide incentives for inflexible resources to acquire flexibility attributes.

# Fast Flex RA – Conclusion

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## Conclusions -

- Achievement of 2030 policy objectives is realistic
- Wellhead's proposal is a simple approach that is easy for resource owners to work with
- Resource owners will follow clearly defined incentives and price signals
- Please give our proposal real consideration
- Thank you!