

GRID SERVICES PURCHASE AGREEMENT

STAKEHOLDER MEETING

MARCH 12, 2019



NAVIGANT

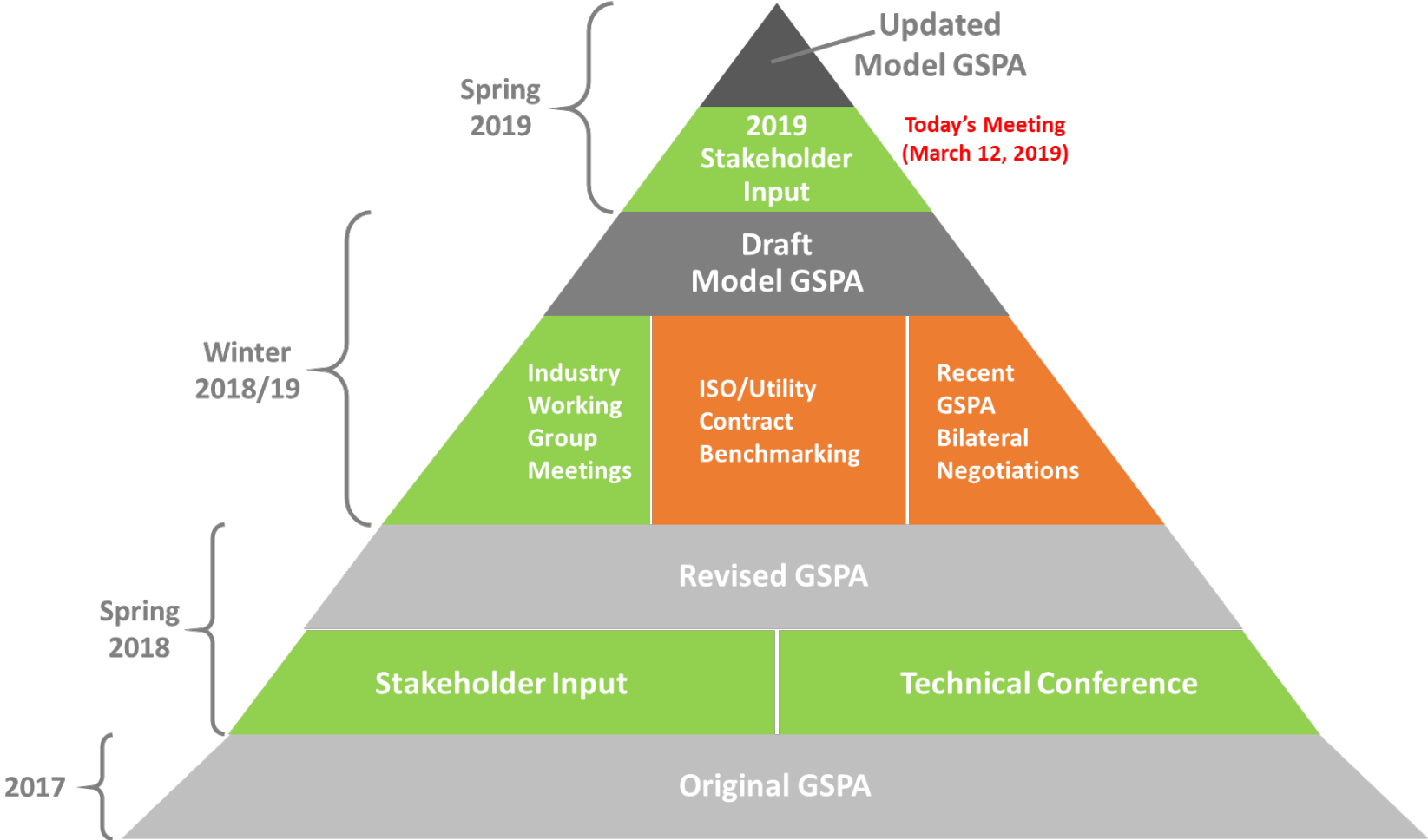
GROUND RULES

- All Working Group and Stakeholder Group meetings, webinars and information exchange are designed solely to provide an open forum or means for the expression of various points of view in compliance with antitrust laws.
- Under no circumstances shall Working Group and Stakeholder Group activities be used as a means for competing companies to reach any understanding, expressed or implied, which tends to restrict competition, or in any way, to impair the ability of participating members to exercise independent business judgment regarding matters affecting competition or regulatory positions.
- Proprietary information shall not be disclosed by any participant during any group meetings. In addition, no information of a secret or proprietary nature shall be made available to Working Group or Stakeholder Group members.
- All proprietary information which may nonetheless be publicly disclosed by any participant during any group meeting shall be deemed to have been disclosed on a non-confidential basis, without any restrictions on use by anyone, except that no valid copyright or patent right shall be deemed to have been waived by such disclosure.



WELCOME FROM
RICH BARONE

MODEL GSPA DEVELOPMENT



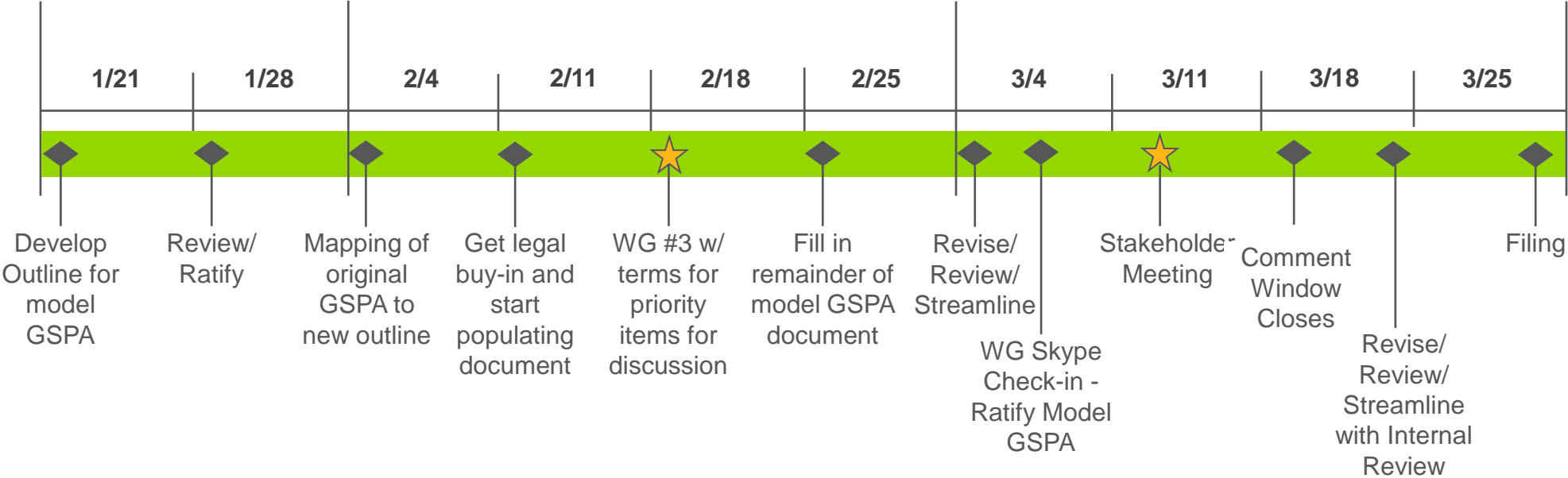
STAKEHOLDER PARTICIPANTS

- Consumer Advocate
- eMotorWerks
- Enbala
- EnergyHub
- Enel
- Engie
- Greenlots
- Go Electric
- Hawaii Energy
- Hawaii Energy Connection
- Honeywell
- Hunt Companies
- Johnson Controls
- Life of Land
- Mosaic Power
- OATI
- PUC
- Shifted Energy
- STEM
- Tesla
- Trane
- WPTF

AGENDA: MARCH 12, 2019

- Welcome – Hawaiian Electric -10 minutes
- Stakeholder Session Approach and Objectives – Navigant - 5 minutes
- Overview of Model GSPA Working Group: Structure, Mechanism, Terms, Exhibits – Navigant – 10 minutes
- Discussion of High Priorities – 60 minutes
- Break and Priority Voting – 15 minutes
- Review Priorities – 10 minutes
- Discussion of Terms – 60 minutes
- Next Steps – 10 minutes

MODEL GSPA TIMELINE



MODEL GSPA ACTIVITIES TO DATE

- 3 Working Group Sessions
- Benchmarked Best Practices
 - Compared existing Hawaiian Electric contracts for inclusivity
- Developed Model GSPA approach
 - Contract
 - Legal
 - Commercial
 - Operations
 - Exhibits: service and/or resource
- Restructured Model GSPA
- Terms Assessed

Note - Model GSPA is intended as the basis for future negotiations and execution

GSPA STAKEHOLDER MEETING OBJECTIVES

- Brief Review of Model GSPA Approach
 - Updated structure
 - Approach to streamlining
 - Comparative review summary
- Deep Dive Discussion of Priority Terms
 - Review Terms
 - Refresh Priorities
 - Share plan to assimilate additional comments for the next 5 working days

MODEL GSPA STAKEHOLDER FEEDBACK APPROACH

During Stakeholder Meeting

- Discuss feedback on flagged terms* to identify any missing priorities or offer varying perspectives
 - Share feedback already received
 - Review comment cards (distributed at beginning of meeting)
 - Solicit additional discussion/comments in real-time

After Stakeholder Meeting

- Continue to accept comments for the next 5 working days**
 - Utilize comment document (“GSPA Commenting Template.pptx”) provided
- Process and consider feedback to inform final revisions to Model GSPA based on input received

* Comments are limited to 5 minutes per presenter

**Send “GSPA Commenting Template.pptx” to demandresponse@hawaiianelectric.com



MODEL GSPA

BENCHMARKING AND STRUCTURE COMPARE

Entity	CONTRACT DESCRIPTION	STRUCTURE
EEI	Developed by utility industry self administered through standardized document	All the legal and commercial requirements are in one agreement and intersects with first part of PSCO agreement. Note – PG&E uses the EEI agreement with some annexures or changes.
XCEL Energy Colorado (PSCO)	Developed by Xcel Colorado for Power Purchase Agreement between wind/solar developer and PSCO	Both Legal and Market Requirements are included into one agreement. Each type of generation has a separate RFP and agreement document tailored to the resource.
ERCOT	ERCOT agreement for Single Generator and Emergency Grid Service	ERCOT has standard legal terms in Single Generator agreement. For Market or Commercial requirements for new renewable resources or demand response a separate manual includes the requirements
NYISO	NYISO agreement for Single Generator and Emergency Demand Response	Similar to ERCOT, NYISO has standard legal terms in an agreement. For Market or Commercial requirements for new renewable resources or demand response a separate manual includes the requirements
GSPA	Hawaiian Electric Proposed Grid Services Purchase Agreement for Demand Side Resources	Separate agreements for each type of generation. Legal and market requirements are two different article
PPA RDG Solar	Hawaiian Electric developed PPA for Solar RDG	One agreement reviewed
PJM and California	PJM ISO Generation Attribute Tracking System (GATS) Term of Use and California Rule 24 for Data Ownership information	These are the jurisdictions which have some language on data ownership. There was no source code escrow agreement.

MODEL GSPA – STRUCTURE - CONTRACT

I. Legal

1. Definitions
2. Terms and Conditions/Terminations
3. Events of Default; Remedies
4. Limitation of Remedies, Liability and Damages
5. Regulatory Filings and Approvals
6. Indemnity
7. Assignment
8. Governing Law
9. Notices
10. Forward Contract
11. Confidentiality
12. Data Ownership
13. Insurance
14. Dispute Resolution
15. Force Majeure

II. Commercial

16. Participant Registration
17. Asset Registration
18. Forecasting
19. Settlement
20. Obligations and Deliveries
21. Payment and Netting
22. Credit and Collateral Requirements
23. Term of Master Agreement

III. Operations

24. Audit
25. Field Services
26. Measurement & Verification
27. Metering Requirements
28. Event Management
29. Technology – Point to Exhibit G
30. Testing
31. Operational Data Requirements
32. Project Implementation
33. Program Management

IV. Miscellaneous

34. Equal Opportunity Employment
35. Other Miscellaneous

MODEL GSPA – STRUCTURE (EXHIBITS)

- Exhibit A: Fast Frequency Response Grid Services
- Exhibit C: Capacity Grid Services
- Exhibit E: Advanced Metering
- Exhibit F: Operational Forecast
- Exhibit G: Data, Integration, and Testing Requirements
- Exhibit H: Contract Capability
- Exhibit I: GSDS Service Level Agreement
- Exhibit J: Reporting
- Exhibit K: Settlement
- Exhibit M: Customer Service Requirements
- Exhibit N: Participant Service Agreement Requirements
- Exhibit O: Form of Trademark License Agreement
- Exhibit R: Form of Letter of Credit

HIGH PRIORITY FOR DISCUSSION

MODEL GSPA TERM	MECHANISM	CATEGORY
12.1 Ownership of Company Data	Data Ownership	Legal
12.2 Source Code	Data Ownership	Legal
16.1 Participant Service Agreement	Participant Registration	Commercial
20.4 Obligations of Participants	Obligations and Deliveries	Commercial
20.6 Standard of Conduct for Supplier	Obligations and Deliveries	Commercial
22.3 Letter of Credit	Credit and Collateral Requirements	Commercial
23.1 Terms and Effectiveness	Term of Master Agreement	Commercial

FOR DISCUSSION

MODEL GSPA TERM	MECHANISM	CATEGORY
3.1 Events of Default	Events of Default; Remedies	Legal
3.2 Rights and Obligations of the Parties Upon Default	Events of Default; Remedies	Legal
3.5 Liquidated Damages Generally	Events of Default; Remedies	Legal
3.7 Failure to meet Contract Capability	Events of Default; Remedies	Legal
4.1 By Supplier	Limitation of Remedies, Liability and Damages	Legal
4.2 By Company	Limitation of Remedies, Liability and Damages	Legal
6.1 Indemnification of Company	Indemnity	Legal
6.2 Indemnification of Suppliers	Indemnity	Legal
11.2 Confidential Information	Confidentiality	Legal
11.4 Expectations	Confidentiality	Legal
11.7 Prohibited Activities	Confidentiality	Legal
13.2 Continuity of Services	Dispute Resolution	Legal

FOR DISCUSSION

MODEL GSPA TERM	MECHANISM	CATEGORY
13.3 Dispute Resolution Procedures	Dispute Resolution	Legal
15.1 Definition of Force Majeure	Force Majeure	Legal
15.2 Events that could qualify as Force Majeure	Force Majeure	Legal
15.3 Exclusions from Force Majeure	Force Majeure	Legal
15.4 Consequences of Force Majeure	Force Majeure	Legal
15.5 Effect of Force Majeure on Events of Default	Force Majeure	Legal
15.6 Effect of Force Majeure	Force Majeure	Legal
15.7 Obligations Remaining after event of Force Majeure	Force Majeure	Legal
15.8 No extension of the term	Force Majeure	Legal
20.1 Rights and Obligations of Both Parties	Obligations and Deliveries	Commercial
20.2 Participant Installation Protection and Control Equipment	Obligations and Deliveries	Commercial
20.7 Project Manager and Participant Contact	Obligations and Deliveries	Commercial

FOR DISCUSSION

MODEL GSPA TERM	MECHANISM	CATEGORY
20.8 Rights and Obligations of the Company	Obligations and Deliveries	Commercial
21.2 Taxes	Payment and Netting	Commercial
21.5 Invoice Disputes	Payment and Netting	Commercial
21.6 Adjustments Due to Inaccuracies in Settlement	Payment and Netting	Commercial
22.4 Maintain and Replenish Letter of Credit	Credit and Collateral Requirements	Commercial
22.5 Company's Right to Draw from LOC or Enforce Security Agreement	Credit and Collateral Requirements	Commercial
24.1 Rights of Company	Audit	Operational
24.2 Rights of Supplier	Audit	Operational
25.1 Customer Service	Field Services	Operational
26.1 Metering Requirements	Metering Requirements	Operational

FOR DISCUSSION

MODEL GSPA TERM	MECHANISM	CATEGORY
3.3 Termination Assistance Services	Events of Default; Remedies	Legal
3.8 Failure to migrate to the DERMS	Events of Default; Remedies	Legal
4.4 Limitations	Limitation of Remedies, Liability and Damages	Legal
7.1 Change in Standard, System or Organization	Assignment	Legal
11.1 Ownership of Materials	Confidentiality	Legal
20.5 Participant Survey	Obligations and Deliveries	Commercial
22.2 Security Agreement	Credit and Collateral Requirements	Commercial
35.4 Further Assurances	Other	Miscellaneous

FOR DISCUSSION

MODEL GSPA TERM	MECHANISM	CATEGORY
35.8 Computation of Time	Other	Miscellaneous
35.9 Headings	Other	Miscellaneous
35.10 Definitions	Other	Miscellaneous
35.12 Proprietary Rights	Other	Miscellaneous
35.13 Settlement of Disputes	Other	Miscellaneous
35.18 Certain Rules of Construction	Other	Miscellaneous
35.19 Set-off	Other	Miscellaneous
35.20 Electric Services by Company	Other	Miscellaneous

FRAMEWORK TO RECEIVE STAKEHOLDER INPUT

Category: Structure/Mechanism/Term	Stakeholder	Issue / Comment	Proposal / Idea

NEXT STEPS

- Receive additional Stakeholder Comments
- Organize and Review Stakeholder Comments
- Identify Update to Model GSPA
- Filing by End of March