MEETING of the Energy Planning & Resources Committee of the Clean Power Alliance of Southern California

Wednesday, August 24, 2022 12:15 p.m.

SPECIAL NOTICE: Pursuant to the Proclamation of the State of Emergency by Governor Newsom on March 4, 2020, AB 361, and enacting Resolutions, and as a response to mitigating the spread of COVID19, the Energy Planning & Resources Committee will conduct this meeting remotely.

Click here to view a Live Stream of the Meeting on YouTube
If the YouTube stream is not working, please use the zoom link.
*There may be a streaming delay of up to 60 seconds. This is a view-only live stream.

To Access the Meeting:
https://us06web.zoom.us/j/85975901993
or
Dial: (720) 707-2699 Meeting ID: 859 7590 1993

PUBLIC COMMENT: Members of the public may submit their comments by one of the following options:

- **Email Public Comment:** Members of the public are encouraged to submit written comments on any agenda item to clerk@cleanpoweralliance.org up to four hours before the meeting. Written public comments will be announced at the meeting and become part of the meeting record. Public comments received in writing will not be read aloud at the meeting.

- **Provide Public Comment During the Meeting:** Please notify staff via email at clerk@cleanpoweralliance.org at the beginning of the meeting but no later than immediately before the agenda item is called.
  
  o You will be asked for your name and phone number (or other identifying information) and agenda item similar to filling out a speaker card so that you can be called on when it is your turn to speak.
  
  o You will be called upon during the comment section for the agenda item on which you wish to speak on. When it is your turn to speak, a staff member will unmute your phone or computer audio.
  
  o You will be able to speak to the Committee for the allotted amount of time. Please be advised that all public comments must otherwise comply with our Public Comment Policy.
  
  o Once you have spoken, or the allotted time has run out, you will be muted during the meeting.

If preferred, you may also submit written comments during the meeting via email to: clerk@cleanpoweralliance.org. The written comments will not be read aloud but will be shared with Committee.

*While downloading the Zoom application may provide a better meeting experience, Zoom does not need to be installed on your computer to participate. After clicking the webinar link above, click “start from your browser.”*
Meetings are accessible to persons with disabilities. Individuals who need special assistance or a disability-related modification or accommodation to participate in this meeting, or who have a disability and wish to request an alternative format for the meeting materials, should contact the Clerk of the Board at least two (2) working days before the meeting at clerk@cleanpoweralliance.org or (323) 640-7664. Notification in advance of the meeting will enable us to make reasonable arrangements to ensure accessibility to this meeting and the materials related to it.

PUBLIC COMMENT POLICY: The General Public Comment item is reserved for persons wishing to address the Board on any Clean Power Alliance-related matters not on today’s agenda. Public comments on matters on today’s Consent Agenda and Regular Agenda shall be heard at the time the matter is called. Comments on items on the Consent Agenda are consolidated into one public comment period. Members of the public who wish to address the Board are requested to contact the Board Clerk, as specified above, at the beginning of the meeting but no later than immediately prior to the time an agenda item is called. Each speaker is limited to two (2) minutes (in whole minute increments) per agenda item with a cumulative total of five 5 minutes to be allocated between the General Public Comment, the entire Consent Agenda, or individual items in the Regular Agenda. Please refer to Policy No. 8 – Public Comment for additional information.

CALL TO ORDER & ROLL CALL

GENERAL PUBLIC COMMENT

CONSENT AGENDA

1. Approve Minutes from July 27, 2022, Energy Committee Meeting
2. Receive and File July 2022 Risk Management Team Report

CLOSED SESSION

3. CONFERENCE WITH LEGAL COUNSEL—ANTICIPATED LITIGATION
   Exposure to litigation pursuant to paragraph (2) of subdivision (d) of Section 54956.9: 1

REGULAR AGENDA

4. Review 2022 Integrated Resource Plan (IRP) Preliminary Results

COMMITTEE MEMBER COMMENTS

ADJOURN – NEXT MEETING SEPTEMBER 28, 2022

Public Records: Public records that relate to any item on the open session agenda for a Committee Meeting are available for public inspection. Those records that are distributed less than 72 hours prior to the meeting are available for public inspection at the same time they are distributed to all, or a majority of, the members of the Committee. Those documents are available for inspection online at www.cleanpoweralliance.org/agendas.
MINUTES
REGULAR MEETING of the Energy Planning & Resources Committee
of the Clean Power Alliance of Southern California
Wednesday, July 27, 2022, 12:15 p.m.

Pursuant to the Proclamation of the State of Emergency by Governor Newsom on March 4, 2020, AB 361, and enacting Resolutions, and as a response to mitigating the spread of COVID-19, the Energy Planning & Resources Committee conducted this meeting remotely.

CALL TO ORDER & ROLL CALL
Chair Parkhurst called the meeting to order at 12:15 p.m. and, Gabriela Monzon, Board Clerk, conducted roll call.

ROLL CALL

<table>
<thead>
<tr>
<th>City</th>
<th>Name</th>
<th>Title</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alhambra</td>
<td>Jeffrey Maloney</td>
<td>Committee Member</td>
<td>Remote</td>
</tr>
<tr>
<td>Carson</td>
<td>Reata Kulcsar</td>
<td>Committee Member</td>
<td>Remote</td>
</tr>
<tr>
<td>Culver City</td>
<td>Daniel Lee</td>
<td>Committee Member</td>
<td>Absent</td>
</tr>
<tr>
<td>Oxnard</td>
<td>Kathleen Mallory</td>
<td>Committee Member</td>
<td>Remote</td>
</tr>
<tr>
<td>Sierra Madre</td>
<td>Robert Parkhurst</td>
<td>Chair</td>
<td>Remote</td>
</tr>
<tr>
<td>South Pasadena</td>
<td>Diana Mahmud</td>
<td>Committee Member</td>
<td>Remote</td>
</tr>
<tr>
<td>Thousand Oaks</td>
<td>Helen Cox</td>
<td>Committee Member</td>
<td>Absent</td>
</tr>
<tr>
<td>Ventura County</td>
<td>Carmen Ramirez</td>
<td>Committee Member</td>
<td>Absent</td>
</tr>
</tbody>
</table>

All votes are unanimous, unless otherwise stated.

GENERAL PUBLIC COMMENT
There was no public comment.

CONSENT AGENDA
1. Approve Minutes from June 22, 2022, Energy Committee Meeting
2. Receive and File June 2022 Risk Management Team Report

Motion: Committee Member Mahmud, South Pasadena
Second: Committee Member Maloney, Alhambra
Vote: The consent agenda was approved by a roll call vote, with minor edits to Item 1. Committee Member Kulcsar abstained from Item 1.

REGULAR AGENDA
3. Approve the Shortlisted Projects as Recommended by the Review Team for the 2021 Power Share RFO
   Natasha Keefer, Vice President, Power Supply, provided a presentation on the 2021 Power Share Request for Offers (RFO) shortlist recommended by the RFO Review Team. Under the Disadvantaged Community Green Tariff (DAC-GT) and
the Community Solar Green Tariff (CS-GT), CPA may procure energy from small-scale renewable projects within disadvantaged communities (DACs), in order to provide 100% renewable energy to low-income customers at a 20% bill discount. Ms. Keefer provided background on the Power Share Program and an overview of CPA’s progress in fulfilling the program requirements. CPA received 8 offers for projects, and each received a rank for six criteria. The valuation results indicate that offers are priced under the CPUC-designated price cap and the RFO Review Team evaluated the offer prices and deemed them reasonable. Ms. Keefer described the DAC-GT program, outlined project and customer eligibility details, and provided an overview of the six project offers received. The RFO Review Team recommends shortlisting five of the projects because they are priced under the price cap, they are all local projects, and all have strong qualitative scores. Ms. Keefer reviewed development risks and experience. In particular, she explained that the projects are sited on rooftops of industrial properties owned by the developers, which is advantageous from a site control perspective. The projects have also received fast track eligibility from SCE, meaning they are able to interconnect.

In response to Committee Member Mahmud’s questions, Ms. Keefer noted that the CPUC approved CPA’s executed Power Share contract and that CPA’s solicitation expresses preference for projects located in the CPUC’s service area. Responding to Chair Parkhurst’s question about the omission of Project A from the shortlist, Ms. Keefer explained that CPA utilizes a tool that screens areas for development and renewable energy projects. Project A did not pass the screening process and was deemed harmful to the local habitat.

Ms. Keefer provided background on the Community Solar Program project eligibility and reviewed the two offers received. The RFO Review Team recommends shortlisting both offers since their Power Purchase Agreement (PPA) prices are beneath the CPUC price cap and have good qualitative scores. Ms. Keefer listed the development risks and developer experience, noting that the projects have begun the interconnection process. CPA also confirmed there are numerous eligible customers within the vicinity of the projects for program enrollment. Ms. Keefer concluded with a review of the recommendations for DAC-GT and Community Solar projects and next steps.

Committee Member Mahmud inquired about the one-year delay for Commercial Operation Date (COD) for the Community Solar Program project in Pico Rivera. Staff clarified that CS-GT projects have more components to develop, such as customer enrollment, securing community sponsors, and going through the elaborate interconnection process with the California Independent System Operator (CAISO), which can all affect the project timeline. Committee Member Mallory inquired if CPA has a process for diversifying project locations; Ms. Keefer indicated that CPA does not have direct control over sites because it is not responsible for the development. However, Ms. Keefer noted that CPA has been working with member agencies in the service territory within disadvantaged communities to educate, encourage community sponsorship, and conduct outreach to increase the number of bids from projects in DACs. Alex Ricklefs, Program Manager, Community Solar, indicated that staff sees community sponsorship as the major barrier to solar interest and hopes to address this for the next RFO cycle. Mr. Ricklefs explained that staff is working on a communication plan to share with the Committee. Chair Parkhurst commented that would be helpful to include it as part of the RFO presentation. Committee Member Mahmud thanked the staff for their hard work and expressed a preference for a focused
effort during the next solicitation to secure DAC-GT projects within Ventura County. Committee Member Kulcsar concurred with Committee Member Mahmud’s comment.

**Motion:** Committee Member Mahmud, South Pasadena  
**Second:** Committee Member Mallory, Oxnard  
**Vote:** Item 3 was approved by a roll call vote.

4. **Approve Entering into Bilateral Negotiations for Power Purchase Agreements for Two (2) Geothermal Resources as Recommended by the Review Team**

Ms. Keefer provided a presentation on the two bilateral offers received for long-term geothermal resources. CPA can enter into two bilateral power purchase agreements with an in-state geothermal project. Ms. Keefer provided background on CPA’s procurement needs, discussed the availability of incremental baseload renewables, and detailed import geothermal resource risks and challenges. Per CPA’s Energy Risk Management Policy, CPA evaluates and negotiates bilateral offers for long-term PPAs. The first offer is for the purchase of 18MW of new, incremental geothermal capacity from an in-state geothermal resource located in a well-developed and reliable geothermal area. The offer comes by way of another CCA that is unable to take full offtake of the available incremental resources. Ms. Keefer noted that the limited transmission into CAISO and the high demand have created scarcity pricing; forecasting indicates much higher geothermal pricing for the 2022 Midterm Reliability (MTR) RFO. The same seller of the first offer is also offering CPA a second offer to purchase 100MW of existing capacity, which is not contingent on approval of the first offer. Ms. Keefer provided background on the second offer, adding that the capacity will be available to CPA on 6/1/2027. The capacity will not count towards CPA’s MTR compliance requirements but will benefit CPA’s technology diversity. Ms. Keefer summarized the project evaluation and noted that pricing is in line with current market pricing. Lastly, Ms. Keefer outlined the RFO Review Team’s recommendations for both the incremental and the existing geothermal offers.

Responding to Chair Parkhurst’s question, Ms. Keefer indicated that these offers are priced higher than offers received for out-of-state projects in the 2021 MTR RFO, adding that the current unique market conditions make it difficult to predict out-of-state pricing for the 2022 MTR RFO. Committee Member Mahmud expressed a desire to include discussions in the upcoming Integrated Resource Plan (IRP) regarding the difficult position Load Serving Entities (LSEs) are placed in by the procurement mandates of scarce resources.

**Motion:** Committee Member Mahmud, South Pasadena  
**Second:** Committee Member Maloney, Alhambra  
**Vote:** Item 4 was approved by a roll call vote.

**COMMITTEE MEMBER COMMENTS**

Chair Parkhurst announced that the first draft of the IRP results will be presented at the August or September meeting; the Committee will be discussing the process related to CPA’s long-term PPA portfolio during the August meeting.

**ADJOURN**

Chair Parkhurst adjourned the meeting at 1:30 p.m.
Staff Report – Agenda Item 2

To: Clean Power Alliance (CPA) Energy Committee
From: Geoff Ihle, Director of Market Risk
Approved by: David McNeil, Chief Financial Officer
Subject: July 2022 Risk Management Team Report
Date: August 24, 2022

July 2022 RMT REPORT

Key Actions
• Reviewed June 2022 market performance
• Reviewed June 2022 generation performance
• Reviewed energy positions and approved 2022-2025 hedges
• Reviewed positions for RPS and carbon free products
• Reviewed Resource Adequacy (RA) positions. Approved a bid proposal for a 2023 RA RFO
• Reviewed July 2022 CRR Allocations

Policy Compliance
The following policy deviation was reported in the June 2022 RMT report. As noted in June, the deviation will persist through September 2022, as CPA acquires additional hedges to meet its Q3 2023 hedge targets.

<table>
<thead>
<tr>
<th>Policy Deviation</th>
<th>Required Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due to an update to the load forecast (resulting in higher forecast energy usage) and a delay in commercial online dates of two projects under long term contract (resulting in lower forecast supply), the Q2 2023 period did not meet the 85% Energy Risk Hedging Strategy minimum at the time of the June 26, 2022, measurement.</td>
<td>The ERMP does not require immediate action to address the policy deviation. Based on CPA’s planned hedging activities over the next several months, the deviation is expected to be corrected by the end of September 2022.</td>
</tr>
</tbody>
</table>

ATTACHMENT
None.
Staff Report – Agenda Item 4

To: Clean Power Alliance (CPA) Energy Committee
From: Natasha Keefer, Vice President, Power Supply
Approved by: Ted Bardacke, Chief Executive Officer
Subject: 2022 Integrated Resource Plan (IRP) Preliminary Results
Date: August 24, 2022

Staff will provide a presentation on the item.

ATTACHMENT

1. 2022 Integrated Resource Plan (IRP) Preliminary Results
2022 Integrated Resource Plan (IRP) Preliminary Results
August 24, 2022
Executive Summary

- CPA is required to file its 2022 IRP by November 1st
- At the end of July, the CPUC released final instructions on the IRP, and CPA has conducted initial modeling
- During August and September, staff is seeking feedback on these initial results from the Energy Committee, Board, and Community Advisory Committee with the target of completing its final analysis by early October
- During the September Board meeting, Staff will be seeking the Board to delegate IRP approval authority to the Energy Committee, per the Energy Committee’s May 2022 recommendation
- During the October Energy Committee meeting, CPA will be seeking approval of the final IRP results and narrative

Today, staff is seeking feedback on initial results; no action is requested
Agenda

- Background
- Modeling Approach
- Preliminary Results
Background
What’s the IRP?

- The IRP proceeding is an important forum for statewide planning and may result in procurement orders for CPA from the CPUC.
- The IRP planning process also informs CPA's internal long-term power procurement strategy.

- The proceeding evaluates resource needs by taking a 10-year-ahead look at electric system needs, based on assumptions developed in conjunction with the CEC (provides demand forecast) and the CAISO (which uses the same assumptions for transmission planning).
- The CPUC uses the assumptions to model overall electric system reliability needs, reliability needs specific to areas with transmission limitations (local areas), and system flexibility needs (such as resources needed to integrate renewables).
- The assumptions are revised every two years to incorporate changes in the resource mix and revisions to State policies (e.g. higher RPS or GHG targets).
- As part of that two-year cycle, LSEs are required to submit plans reflecting their individual procurement preferences and submission requirements as directed by the CPUC.
- When needs are identified, the CPUC authorizes procurement in the form of a Commission Decision.
IRP Modeling

**Inputs**
- Load forecast
- CPA renewable and emissions targets (based on rate product content)
- Generation resource types and costs (Solar, wind, storage, geothermal, etc.)
- Transmission system constraints
- Other market assumptions

**Outputs**
- Optimal selection of CPA’s portfolio resources (i.e., least-cost mix of technologies to meet load and other constraints) (MW)
- Expected renewable and carbon free generation (MWh)
- Expected portfolio costs ($)
- Expected total emissions (MMT)
- Other reliability metrics

**Diagram:**
- Inputs flow to Forecast Model (PLEXOS)
- Outputs from Forecast Model (PLEXOS)
- Determine if CPA’s portfolio meets CPUC targets
- Revise inputs as necessary
2022 IRP Overview

- 2022 IRPs will be due on November 1st
- Planning efforts will be focused on 2035 targets (compared to 2030 in the last IRP)
- LSEs required to adopt conforming portfolios consistent with two statewide greenhouse gas (GHG) reduction scenarios - a 38 and 30 million metric ton (MMT) target
  - If CPA’s base portfolio meets or exceeds the 30 MMT target, no higher GHG 38 MMT case is necessary
- CPUC recommends planning for new resources that requires longer lead times for development, including out-of-state renewables and offshore wind
- CPA’s portfolio will be developed to address both CPA organizational goals and statewide GHG benchmarks
  - CPA’s plans will be optimized to achieve the three goals of reliability, GHG reduction, and least-cost procurement
  - Will reflect renewable and carbon free procurement for customer demand (embodied in current and future product offerings), which will far exceed the California 2030 RPS target of 60% by next year
Modeling Approach
Inputs and Scenarios

Although not required for the CPUC filing, for internal planning, CPA will be running the following scenarios prior to IRP submission, if possible:

<table>
<thead>
<tr>
<th>Key Input</th>
<th>Base Case</th>
<th>Low Case</th>
<th>High Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load forecast</td>
<td>CPUC-assigned</td>
<td>Low temps and high BTM</td>
<td>High temps and high electrification</td>
</tr>
<tr>
<td>New build resource types and costs</td>
<td>CPUC assumptions, including resource RA accounting</td>
<td>N/A</td>
<td>CPA internal assumptions reflecting current market pricing and Inflation Reduction Act</td>
</tr>
<tr>
<td>Forecasted market power prices</td>
<td>Vendor mid-case</td>
<td>No Federal carbon tax</td>
<td>High gas prices</td>
</tr>
<tr>
<td>CPA renewable and carbon free targets (rate products)</td>
<td>Lean and Clean merge into a single compliance product and CPA achieves SB 1020 targets by 2035 (Scenario 4)</td>
<td>N/A</td>
<td>Clean achieves 100% renewable by 2030, Lean continues to be a compliance product (Scenario 2)</td>
</tr>
</tbody>
</table>

Presented today: Lean and Clean merge into a single compliance product and CPA achieves SB 1020 targets by 2035 (Scenario 4)

To be presented in the future once complete: Clean achieves 100% renewable by 2030, Lean continues to be a compliance product (Scenario 2)
As discussed during the May Energy Committee meeting, CPA is modeling Scenario 2 (high) and Scenario 4 (low) for the IRP:

### Scenarios for RPS and CF Annual Targets

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Description</th>
<th>Lean Power</th>
<th>Clean Power*</th>
<th>100% Green Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1</td>
<td>CPA achieves 100% renewable for all customers by 2035</td>
<td>100% renewable by 2035</td>
<td>100% renewable by 2030</td>
<td>100% renewable today</td>
</tr>
<tr>
<td>Scenario 2</td>
<td>CPA achieves 100% renewable for Clean by 2030</td>
<td>RPS/GHG Free Compliant</td>
<td>100% renewable by 2030</td>
<td>100% renewable today</td>
</tr>
<tr>
<td>Scenario 3</td>
<td>CPA achieves 100% renewable for Clean by 2035</td>
<td>RPS/GHG Free Compliant</td>
<td>100% renewable by 2035</td>
<td>100% renewable today</td>
</tr>
<tr>
<td>Scenario 4</td>
<td>SB 1020 by 2035 – have Lean and Clean merge</td>
<td>RPS/GHG Free Compliant and exceeds SCE’s estimated emissions intensity</td>
<td>100% renewable today</td>
<td></td>
</tr>
</tbody>
</table>

*Clean Power will maintain an emissions intensity target that exceeds SCE’s estimated emissions intensity*
### Scenario 4 (Base Case)

**Lean/Clean Merge to Compliant Product**

Starting in 2025, Lean and Clean merge into a single product given the trajectory for statewide emissions reduction goals:

- Consistent with proposed SB 1020
- Renewable content is based on RPS compliance
- Maintains Clean’s goal of achieving an emissions intensity target less than SCE

Simplifies CPA’s rate offerings, consolidating them into a low-cost option and a premium option

<table>
<thead>
<tr>
<th>Year</th>
<th>Lean</th>
<th>Clean</th>
<th>100% Green</th>
<th>Total Portfolio</th>
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<tbody>
<tr>
<td>2023</td>
<td>43/43</td>
<td>50/59</td>
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<td>76/79</td>
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<td>2024</td>
<td>45/45</td>
<td>50/61</td>
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<td>82/84</td>
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<tr>
<td>2025</td>
<td>50/50</td>
<td>50/66</td>
<td>100/100</td>
<td>85/87</td>
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</tbody>
</table>
Scenario 2 (High Scenario)

Clean Achieves 100% Renewable by 2030

Clean Rate is 100% renewable by 2030

- Offer Lean customers 90% GHG Free by 2035
  - Consistent with proposed SB 1020
  - Renewable content is based on RPS compliance
- Risk is that Clean rate could become less competitive with SCE
- Mitigation Option is that if current Clean Rate customers/cities want to lower costs, they could opt-down to Lean

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</table>
Caveats

Given the timing of the CPUC issuing final instructions/inputs to LSEs, CPA has only completed a preliminary run of the base case

These results are indicative only; all inputs and results continue to be vetted

Procurement costs are still being tabulated and will be presented at next month’s Energy Committee

CPA will continue to fully validate the base case and run additional scenarios as time allows ahead of the November 1 filing deadline

CPA will continue to update its internal forecasts and evaluate future procurement scenarios as part of its internal planning, beyond the IRP filing date
Capacity Buildout Scenario Results

- In addition to our existing contracts, CPA will fill its future resource needs with a mix of solar, battery storage, wind, and existing hydro.

- Due to CPA’s large number of 100% Green Customers, the base case is anticipated to meet and exceed the 2035 30 MMT GHG target.
Comparison to 2020 IRP Results
Reliability

- CPA is meeting the majority of its RA requirements with energy storage
Typical CPA Day in 2025

- Utility Scale Solar is the major resource to serve customer demand
- CPA is still relying on market purchases to meet its load
Typical CPA Day in 2030

- Solar is still the major resource to serve customer demand and creating excess energy in the mid-day.
- Storage is helping reduce solar/wind over-generation by discharging it during the peak.

![2030 CPA Hourly Load-Resources Balance Graph]
Typical CPA Day in 2035

Curtailment starts to emerge
Key Findings / Discussion

- CPA modeling optimizes to achieve the lowest cost power procurement while meeting reliability and environmental compliance.

- Because of the large number of 100% Green Rate customers, CPA expects to meet and exceed the State 30 MMT GHG targets, even in its lowest renewables case.

- Capacity requirements are a large driver of resource selection (specifically storage).

- Because the CPUC’s resource cost assumptions are out of date, CPA plans to run additional scenarios that reflect current market conditions, regulatory changes, and the passing of the Inflation Reduction Act.

- Although offshore wind is a candidate resource for CPA’s portfolio, offshore wind was not selected due to its high cost.
  
  - The CEC has proposed a preliminary planning goal range of 2,000-5,000 MW of offshore wind for 2030, and a procurement order may be imminent. In its additional scenarios, CPA may evaluate a portfolio with some offshore wind.
Questions?