



Study Guide for Apprentice Hydro Station Operator (AHSSO)

Technical Interview Guide Number: 8021

Human Resources
Talent Planning and Programs
Southern California Edison
An Edison International Company

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Introduction

The **8021 Apprentice Hydro Station System Operator (AHSSO) Technical Interview Guide** was designed to assess technical knowledge necessary to perform the job. This guide contains strategies and study references to prepare for the interview.

Interview Session

It is important that you follow the directions of the interviewers exactly. During the interview, you may **NOT** leave the interviewing area, talk, smoke, eat, or drink. Since this interview will take approximately one hour, you should consider these factors before the interview begins.

All cellular/mobile phones, pagers or other electronic equipment will NOT be allowed in the interviewing area.

A non-programmable basic calculator will be provided for you to use during the interview. You will NOT be able to bring or use your own calculator during the interview.

Study Guide Feedback

At the end of this Guide you have been provided with a Study Guide Feedback page. If a procedure or policy has changed, making any part of this Guide incorrect, your feedback would be appreciated so that corrections can be made.

Interview Strategies

Introduction

Your emotional and physical state during the interview may determine whether you are prepared to do your best. The following list provides common sense techniques you can use before the interview begins.

| Technique | Remarks |
|------------------------------------|--|
| <i>Be confident</i> | <ul style="list-style-type: none"> - If you feel confident about passing this interview, you may lose some of your anxiety. - Think of the interview as a way of demonstrating how much you know, the skills you can apply, your abilities, the problems you can solve, and your good judgment capabilities. |
| <i>Be punctual</i> | <ul style="list-style-type: none"> - Arrive early enough to feel relaxed and comfortable before the interview begins. |
| <i>Concentrate</i> | <ul style="list-style-type: none"> - Try to block out all distractions and concentrate only on the interview. You will not only finish faster but you will reduce your chances of making careless mistakes. - If the interview area becomes noisy or there are other distractions or irregularities, mention them to the interviewers immediately. |
| <i>Understand the question</i> | <ul style="list-style-type: none"> - Listen carefully to each of the questions and follow all directions provided by the interviewers. |
| <i>Answer interview questions-</i> | <ul style="list-style-type: none"> - Ensure your answers are precise, complete, unambiguous and succinct. |

Remember the techniques described in this section are only suggestions. You should follow the methods that work best for you.

Study References

The **8021 Apprentice Hydro Station System Operator (AHSSO) Technical Interview** requires you to answer technical questions that assess specific technical knowledge required to perform the job. They will require you to demonstrate your knowledge of technical concepts including basic AC/DC theory, electrical equipment purpose and application, protective devices, power transmission and distribution theory, electrical symbols, mechanical equipment, maintaining records and logs, shift change/turnover, safety procedures, mathematics (addition, subtraction, multiplication, division, volume, fractions, conversions, and decimals).

You can use the following references to guide your preparation.

- ✓ George Hart and Sammie Hart (2009). Ugly's Electrical References. United Printing Arts.
- ✓ John Traister and H. Brooke Stauffer (2000). Electricians Troubleshooting and Testing. The McGraw-Hill Companies, Inc.
- ✓ Mathematics Made Simple (2003). Thomas Cusick. Publisher: Made Simple.
- ✓ OSHA Glossary of Terms. U.S. Department of Labor. Electric Power, Generation, Transmission and Distribution. 2011.
- ✓ Public Utilities Commission of the State of California. General Order No. 167. Enforcement of Maintenance and Operation Standards for Electric Generating Facilities. September 2005.
- ✓ Syed A. Nasar (1990). Schaum's Outlines of Electric Power Systems. The McGraw-Hill Companies, Inc.
- ✓ Terrell Croft and Wilford Summers (1992). American Electricians' Handbook. 12th Edition. Ch. 4. Switchboards and Switchgear.
- ✓ United States Department of Interior Bureau of Reclamation. Hydro Power Information: Hydro Electric Power. July 2005.
- ✓ United States Department of Agriculture. Rural Utilities Services. Design Guide for Rural Substations. RUS Bulletin 1724E-300. Chapter 4. Physical Layout. June 2011.
- ✓ United States Department of Interior Bureau of Reclamation. Facilities, Instructions, Standards and Techniques. Volumes:
 - 1-1. Hazardous Energy Control Program. March 2002.
 - 1-11. Conduct of Power Operations. December 2002.
 - 1-12. Abnormal Operations Generic Technical Guidelines for Power Stations. March 2003.
 - 3-8. Operation, Maintenance, and Field Test Procedures for Protective Relays and Associated Circuits. Appendix A Glossary of Terms Protective Relaying and Protection Circuits. May 2011.
 - 3-11. Generator Thrust Bearing Insulation and Oil Film Resistance. May 1991.
 - 3-29. Energized Facility Maintenance. May 1990.

Study Guide Feedback

Please use this page to notify us of any changes in policies, procedures, or materials affecting this guide. Once completed, return to:

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