

Series Outline

1. High Voltage Transmission, 1911-1988
2. Precipitation-Static Reduction Research, 1931-1951
3. Nuclear Power, 1940-1988
4. Power Generation, 1948-1988
5. Organizations, 1932-1988
6. Bonneville Power Administration, 1935-1988
7. United Nations Special Fund Assignment to India, 1957-1959
8. Properties of Electricity, 1922-1982
9. Biographical, 1930-1987
10. Class Materials, 1934-1956

Detailed Description of the Collection

Box

1. High Voltage Transmission, 1911-1988 (96 boxes)

Eugene Starr is perhaps best known for his important contributions to the practice of transmitting high-voltage electricity across distances of many hundreds of miles. The large collection of published papers, internal reports, field data, correspondence and memoranda in Series 1 documents Starr's seven decades of work on the issue of high-voltage transmission. In so doing, the series reflects Starr's interest in engineering and testing reliable transmission systems able to withstand the natural elements while minimizing the risks posed by the systems to humans and other animal life.

1.001 Papers and Presentations by Starr, 1942

Folder

- 1.1 "Basic Analysis of Electric Power Transmission - Conventional and Compensated Alternating-Current and Proposed Direct-Current Systems" (EC Starr) - binder with materials, 1942
- 1.2 "Basic Analysis of Electric Power Transmission - Conventional and Compensated Alternating-Current and Proposed Direct-Current Systems" (EC Starr) Copy 1, 1942
- 1.3 "Basic Analysis of Electric Power Transmission - Conventional and Compensated Alternating-Current and Proposed Direct-Current Systems" (EC Starr) Copy 2, 1942
- 1.4 "Basic Analysis of Electric Power Transmission - Conventional and Compensated Alternating-Current and Proposed Direct-Current Systems" (EC Starr) Copy 3, 1942
- 1.5 "Basic Analysis of Electric Power Transmission - Conventional and Compensated Alternating-Current and Proposed Direct-Current Systems" (EC Starr) Copy 4, 1942
- 1.002 Papers and Presentations by Starr, 1926-1927, 1945, 1952, 1979
 - 2.1 "Dielectric Phase Angle Measurements by Means of the Cathode-Ray Oscillograph" (EC Starr), 1926
 - 2.2 "The Cathode-Ray Oscillograph as a High-Voltage Wattmeter" (EC Starr), 1927
 - 2.3 "Evaluation of Transmission-System Resistance and Corona Power Losses" (EC Starr) - 2 copies, 1945
 - 2.4 "The Economy of Higher Transmission Voltages" (EC Starr) - 9 copies, data, calculations, and figures, 1952
 - 2.5 "Electric Power Generation" - revision for Encyclopedia of Science and Technology, 1979
- 1.003 Papers and Presentations by Starr, 1960, 1969, 1972, 1980-1981, 1984
 - 3.1 "Power Circuit Breaker Testing in the Field" - draft of summary for CIGRE (EC Starr), 1960
 - 3.2 "Trends of Development in Electric Power Generation and Transmission" (EC Starr), 1960
 - 3.3 "Snettisham HVDC Project" (EC Starr), 1969
 - 3.4 "Transient Performance of Pacific Intertie" (EC Starr), 1972
 - 3.5 "The Developments in High Voltage Direct Current - an Overview" (EC Starr) - 4 copies, 1980
 - 3.6 "Mechanical Model of AC Electric Transmission" (EC Starr) - original, draft and 23 copies, 1981
 - 3.7 "Generating Resource Protection by Asynchronous Connection to Network" (EC Starr), 1984
 - 3.8 "Recent Major Interruptions of Pacific NW-SW AC Intertie" (EC Starr) - 20 copies, 1984
- 1.004 Papers and Presentations by Starr, 1938, 1940 undated
 - 4.1 "Artificial Transmission Line Simulating" (EC Starr) - drafts, data and calculations, 1938
 - 4.2 "Storm Static Radio Interference Phenomena Originating on Aircraft" (EC Starr) - handwritten draft w/appendices,
 - 4.3 "Transmission-Line Loading for Maximum Economy of Operation" (EC Starr) - original drafts, undated
 - 4.4 "Transmission-Line Power and Current Density for Maximum Economy" (EC Starr) - handwritten draft and calculations, 1940
 - 4.5 "AC Power Limit Studies - Steady State" (EC Starr) - multiple drafts, materials + Appendix I, 1940
- 1.005 Papers and Presentations by Starr, 1984 undated
 - 5.1 "Transmission Project Planning" (EC Starr) + materials and other reports by Starr, 1984
 - 5.2 ECS Reports on Power Transmission - materials, drafts, notes,
- 1.006 Papers and Presentations by Starr, 1930, 1948, 1963-1964, 1970, 1977 undated
 - 6.1 "Research" - presentation by Starr, 1930
 - 6.2 "Radio Interference" - presentation by Starr, undated

- 6.3 "Power System Stability" - lecture given by Starr at NW Power Pool, 1948
- 6.4 Materials for General Report on DC Transmission - I, 1963
- 6.5 Materials for General Report on DC Transmission - II, 1963
- 6.6 "General Report on DC Transmission - I" (EC Starr) - Conference Paper for AIEE 1963 Winter General Meeting - materials and drafts, 1963
- 6.7 Group 42 (EHV A-C) presentation by Starr, undated
- 6.8 Group 43 H-V DC - presentation by Starr, 1964
- 6.9 "Status of the HVDC Pacific Intertie", 1970
- 6.10 "HVDC Pacific Intertie Developments" (EC Starr), 1977
- 6.11 "Report to D-C Subcommittee of Transmission and Distribution Committee" (EC Starr), 1977
- 1.007 Papers and Presentations by Starr, 1942, 1960-1964, 1968-1969 undated
- 7.1 Figures from Radio Influence of HV Lines by ECS and EFS, 1942
- 7.2 List of slides, vault withdrawal orders, prints of some slides, color enlargements, speech notes + LMFBR viewgraph, 1960 1969
- 7.3 Photos and Figures for HVDC Paper by Starr,
- 7.4 Binder of Slides with descriptions from Westinghouse, 1968
- 7.5 Small and Large Prints of 2x2 slides with descriptions, 1960-1964
- 1.008 Glass Slides Prepared for Lectures by Eugene Starr, 1960, 1969 (50 items) [Descriptions of glass slides contained in Starr Box 1.007, Folder 7.2]
- 1.009 Slides, Negatives and Prints from Presentations by Eugene Starr, 1970 (224 items) [Presentations on multiple topics including nuclear energy.]
- 1.010 Slides, Negatives and Prints from Presentations by Eugene Starr, 1955 [Five numbered sets of prints on the following subjects: corona, the Bonneville Power Administration High Voltage Test Facility, inverter operation and rectifier operation. Four slides related to a sodium graphite reactor, Atomic Energy Commission. Two slides on fault test data collected by the Bonneville Power Administration.]
- 1.011 Research Materials re: Direct Current, 1959-1982, 1984
- 11.1 "High Voltage Direct Current Transmission - an Annotated Bibliography" (Lava), 1968
- 11.2 "Study Committee 10 - D.C. Transmission at Extra High Voltage - Progress Report: 1966-1968" + Appendices A, 1, 2, 3, 4 (Lane, Last), 1968
- 11.3 Direct Current Links - Agenda Items, Procedures, 1970 1974
- 11.4 High Voltage Direct Current - CIGRE Special Reports, Discussions, Proceedings, 1962-1982
- 11.5 Reports on Trips and Meetings, 1968-1980
- 11.6 Status and Trends in High Voltage Direct Current Transmission - 10 papers, 1959-1982
- 11.7 "An Annotated Bibliography of High Voltage Direct Current Transmission 1969-1983" (BPA), 1984
- 1.012 Research Materials re: Direct Current, 1915, 1939, 1945-1976
- 12.1 "High-Voltage High-Pass Network" - lab information, measurements (Stone), 1961
- 12.2 "The Thury System of Direct Current Transmission" (Baum) + other materials and negatives of Thury and Generator, 1915 1939
- 12.3 HVDC Papers (undated),
- 12.4 HVDC Papers, 1962-1969
- 12.5 HVDC Power Transmission - correspondence, 1945-1976
- 1.013 Research Materials re: Direct Current, 1963-1983
- 13.1 "DC and Low Frequency Impedance for the Ground Return Mode of an Overhead HVDC Transmission Line - Final Report: Phase 1 Volume I" (Bracken, Feero), 1982
- 13.2 "Magnetospheric Effects of Power Line Radiation" (Park & Helliwell), 1978
- 13.3 "Report on the Study of Solar Induced Currents for the Proposed 500 kV Transmission Line" (Goddard & Boerner), 1978
- 13.4 AC/DC Harmonic Measurements / AC-DC Transmission Systems, 1977-1978
- 13.5 AC-DC Interconnection - papers, 1963-1982
- 13.6 DC Links - special report and papers, 1982
- 13.7 HVDC Papers, 1970-1983
- 13.8 HVDC Transmission - data, 1963-1973
- 13.9 HVDC Transmission Publications, 1962-1965
- 1.014 Research Materials re: Direct Current, 1967-1983, 1988

- 14.1 "Superconducting Power Transmission by Low-Voltage Cable" (Merriam / Gulf General Atomic), 1968
- 14.2 "Superconducting Transmission Lines" (Snowden / Gulf General Atomic) 2 copies, 1970
- 14.3 Superconductivity - papers and articles, 1967-1983
- 14.4 "Superconductivity Applications on an Electric Power System: a system engineering study" - draft (BPA), 1988
- 14.5 Multiterminal Transmission - 2 papers, 1968 1979
- 14.6 "Multiterminal HVDC Systems" (Vithayathil) - 2 copies, 1983
- 14.7 "Panel Session on Prospects for Multiterminal HVDC Transmission" IEEE Summer Meeting - 9 papers, 1977
- 14.8 "Panel Session on Prospects for Multiterminal HVDC Transmission" IEEE Winter Meeting - 9 papers, 1980
- 1.015 Research Materials re: Direct Current, 1978, 1983
- 15.1 "International Symposium on HVDC Technology - 'Sharing the Brazilian Experience' - Proceedings Part I - Papers", 1983
- 15.2 "International Symposium on HVDC Technology - 'Sharing the Brazilian Experience'" - Final Announcement + Program Brochure, 1983
- 15.3 "Proceedings of the Symposium on HVDC Power Transmission - Held by the US-USSR Joint Committee on Cooperation in the Field of Energy" (BPA), 1978
- 15.4 American Papers from US/USSR DC Power Transmission Symposium, 1978
- 15.5 Russian Papers from US/USSR DC Power Transmission Symposium, 1978
- 1.016 Research Materials re: Direct Current, 1940-1975, 1982-1983
- 16.1 "Study Report of Electric Utility Industry in Eight European Countries" (BPA), 1975
- 16.2 HVDC in England, 1963-1969
- 16.3 HVDC in Italy / Europe, 1964-1969 1983
- 16.4 HVDC in Japan, 1962-1969 1982
- 16.5 HVDC in New Zealand, 1965-1969
- 16.6 HVDC in Sweden - technical data and articles, 1940-1974
- 16.7 HVDC in the USSR, 1968-1971
- 16.8 Russian & Swiss Papers - untranslated, 1962 1964
- 16.9 Volga Hydroelectric Station, 500 & 750 kV Transmission Lines - translated from Russian,
- 16.10 500 amp; 750 kV Transmission Lines - untranslated,
- 1.017 Research Materials re: Direct Current, 1939, 1963-1984
- 17.1 "A Survey of the Electric Power System of the Cornucopia Gold Mines, Cornucopia, Oregon" (Stone), 1939
- 17.2 "Electricity in South Africa" (Electricity Supply Commission), 1975
- 17.3 "Generating Capacity in the U.S. Electric Utilities - An Update" (EPRI), 1984
- 17.4 "HVDC in Canada - Manitoba Hydro, Hydro-Quebec, Nelson River Project, 1963-1983
- 17.5 "The CPA/UPA 400 kV HVdc Project" (Poppens, Heiser, Nelson) - 2 items, 1976
- 17.6 CIGRE Reports on the Equipment of the Cabora Bassa Scheme, 1975
- 17.7 HVDC in California - South end of Pacific Intertie, 1969
- 17.8 HVDC in Paraguay and Brazil, 1979 1982
- 17.9 HVDC in Zaire and South Africa, 1969 1972 1975
- 1.018 Research Materials re: Direct Current, 1967-1969, 1982
- 18.1 "HVDC Transmission Notes" (Gunn), 1968
- 18.2 "Main Roles of the Three Gorge Project Defined in the Yangtze River Basin Planning" + other projects planned in China, 1982
- 18.3 HVDC Papers (Hingorani) - 6 papers, 1967-1969
- 1.019 ASEA HVDC Transmission Study Course, Ludvika, 1962
- 1.020 Assorted Papers re: High Voltage Electricity, 1927, 1951-1956, 1961-1962, 1968-1969, 1971-1979, 1982-1984
- 20.1 HV Papers, 1927 1951-1956 undated
- 20.2 HV Papers, 1961-1962 1968-1969
- 20.3 HV Papers, 1971-1979
- 20.4 HV Papers, 1982-1984
- 1.021 Assorted Papers re: High Voltage Electricity, 1961, 1966, 1973-1974, 1984-1986
- 21.1 "Guide for Safety in Alternating-Current Substation Grounding" (AIEE), 1961
- 21.2 "Revue Generale de l'Electricite" (Organe de la Societe Francaise des Electriciens), 1966
- 21.3 Communication - papers and reports, 1974 1984

- 21.4 EHV - UHV Symposium - Proceedings and papers, 1973
- 21.5 Outline of chapter on power transmission & high voltage - entry for Encyclopedia of Physical Science & Technology (S.A. Annestrand) + detailed instructions for authors, 1986
- 21.6 "Power Transmission, High Voltage" article for Encyclopedia of Physical Science and Technology (Annestrand), 1985
- 1.022 Materials re: High Voltage Electricity Standards, 1927, 1952-1963, 1968-1971, 1973-1976, 1980-1986
 - 22.1 Notes on Better Grounding (Copperweld Steel Co.), 1927
 - 22.2 Standards - Reports, 1952-1962
 - 22.3 National Academy of Sciences - Sub-Panel 01 Advisory to Bureau of Standards on High Voltage Laboratory, 1960-1963
 - 22.4 Correspondence and Reports regarding revision of standard c92.2 - voltages above 500 kV, 1968-1971
 - 22.5 International Electrotechnical Commission (IEC) Standard Voltages, 1973-1975
 - 22.6 Revision comments for NESC Grounding Rules, 1976
 - 22.7 Standards Material from P. L. Bellaschi, 1980-1983
 - 22.8 NESC - American National Standard C2 - Revision Comments for Grounding Rules, 1984-1986
 - 22.9 IEEE Standards Committee - contract, 1986
- 1.023 Materials re: High Voltage Electricity Testing, 1962-1978 undated
 - 23.1 High Voltage Engineering Lab - figures and calculations, undated
 - 23.2 HV-DC Test Center - test data, reports, photos, 1962-1978
- 1.024 Materials re: High Voltage Electricity Testing, 1965, 1971-1980 undated
 - 24.1 "Benton-Franklin #2 115-kV Line - Test Report" (BPA),
 - 24.2 HVDC R&D Work by BPA - "A 1500 kV DC Test Project" (5 copies), 1965
 - 24.3 "Prototype 1100 kV Test Facilities Project Progress Reports 12-24", 1975-1976
 - 24.4 Dedication of Project UHV Test Facility (General Electric (GE)), 1978
 - 24.5 1100/1200 kV UHV Test Program, 1971-1979
 - 24.6 BPA Test Program, 1974-1975 1980
 - 24.7 "1200 kV Prototype Transmission Project" (BPA) - Quarterly Reports 4, 11, and 14 + photos, 1977-1980
- 1.025 Materials re: High Voltage Electricity Testing, 1944-1976 undated
 - 25.1 High Voltage Test Facilities - correspondence, 1968-1972
 - 25.2 "Proposal for Conducting a Study of Transmission and Distribution Laboratory Facilities" (EPRI), 1974
 - 25.3 EPRI Test Lab Facilities Studies, 1944-1975
 - 25.4 EPRI Test Lab Facilities Study, 1975
 - 25.5 "Study of Transmission and Distribution Laboratory Facilities - final report" (EPRI), 1975
 - 25.6 "Recommendations for Transmission and Distribution Test Facilities" (EPRI), 1976
 - 25.7 CESI (Centro Elettrotecnico Sperimentale Italiano) - lab activity and facility reports,
- 1.026 Materials re: High Voltage Electricity Testing, 1965-1973
 - 26.1 Electric Power Research & Development Center, 1968
 - 26.2 Edison Electric Institute - correspondence re: Electric Research Council Funding, 1965-1970
 - 26.3 "Electric Utilities Industry Research and Development Goals through the Year 2000" (Electrical Research Council), 1971
 - 26.4 Electric Research Council, 1970-1973
- 1.027 Materials re: High Voltage Electricity Testing, 1962-1983 undated
 - 27.1 High Voltage Transmission Research Facility in Heidelberg - 4 publications, 1972 undated
 - 27.2 "Bipolar DC Transmission Research Above ± 600 kV at Project UHV" (EPRI), 1980
 - 27.3 1980 CIGRE Paper - "Bipolar HVDC Transmission Lines Research above ± 600 kV",
 - 27.4 High Power Testing - information on foreign test facilities, reports, 1962-1983
- 1.028 Materials re: High Voltage Electricity Testing, 1939-1940, 1961, 1963-1964, 1973 undated
 - 28.1 "Preliminary Proposal Covering Electronic Rectifier/Inverter Equipment for an Experimental High Voltage D.C. Transmission System" (Allis-Chalmers), 1939
 - 28.2 HVDC rectifier test data bibliography, 1939-1940
 - 28.3 "Design and Development of High Voltage Plastic Bushings for DC Test Facility" (Gradasoff) w/photos, 1961
 - 28.4 "Shiobara 600 kV Laboratory -Central Research Institute of Electric Power Industry", 1963
 - 28.5 "BPA Big Eddy HVDC Terminal - Preliminary Engineering Study - Book # 2" (General Electric, ASEA), 1964

- 28.6 HVDC Test Line Data Photos, 1964
- 28.7 "Extra High Voltage Direct Current Test Center - Big Eddy Substation / The Dalles, Oregon" (BPA), 1973
- 28.8 "Proposal to the Edison Electric Institute for the Construction, Operation, and Evaluation of a 1 kilowatt-hour Load Leveling Battery Test Module" (ESB, Inc.), undated
- 28.9 "BPA D-C Test Program" - purpose, drawings, photos, undated
- 1.029 Materials re: High Voltage System Planning, 1945-1985
- 29.1 "Preliminary Draft - 230 kV Transmission Economic Study", 1945
- 29.2 Transmission Costs and Transient Limits, 1945 1957
- 29.3 Phase-Angle Meter for Power System Analysis - articles and ads, 1967-1969
- 29.4 Sylmar Earthquake, 1971
- 29.5 Short and Long Range Power Planning Task Force, 1972
- 29.6 "HVDC - Research for the 70's - A Basic Program" (Hughes Brothers), 1972
- 29.7 "HVDC in Future Power Systems" (Hughes Research Laboratories), 1972
- 29.8 "Northwest Public Power Association Engineering and Operations Conference Proceedings", 1976
- 29.9 Transmission Line Capacity Allocation Study (Poon), 1977
- 29.10 System planning and analysis / costs - papers and correspondence, 1946-1985
- 1.030 Materials re: High Voltage System Planning, 1978-1979
- 30.1 "Cost Components of High Capacity Transmission Options - Draft Report - Sections 2-10" (Gilbert, Commonwealth), 1978
- 30.2 "Transmission System Facilities Ten-Year Development 1978-1987 - Tentative Forecast" (BPA), 1978
- 30.3 "Transmission System Facilities Ten-Year Development 1979-1988 - Tentative Forecast" (BPA), 1979
- 1.031 Materials re: High Voltage System Planning, 1980, 1982, 1984
- 31.1 "Incorporating HVDC Power Transmission into System Planning - a Symposium Sponsored by the Division of Electric Energy Systems United States Department of Energy" - Proceedings, 1980
- 31.2 "Countermeasures for Earthquakes in the Electric Utility Industry of Japan" (Japan IERE Council), 1980
- 31.3 "Forecasts of Electricity Consumption in the Pacific Northwest - Final" (Bonneville Power Administration), 1982
- 31.4 "Neglected Opportunities" (The Institute for the Oregon Policy Studies), 1982
- 31.5 Task Force for Study of Cost Difference in AC and DC Systems - papers on transmission and energy transfer, 1984
- 1.032 Materials re: High Voltage System Planning, 1962, 1974, 1980, 1982, 1984
- 32.1 "Incorporating HVDC Power Transmission into System Planning - a Symposium Sponsored by the Division of Electric Energy Systems United States Department of Energy" - Proceedings, 1980
- 32.2 "The Developments in High Voltage Direct Current - an Overview" (EC Starr) - paper for Department of Energy HVDC Symposium, 1980
- 32.3 System Planning - special reports and papers, 1982
- 32.4 Power System Planning and Operation - special reports and papers, 1962 1974
- 32.5 Power System Planning and Development - special reports and papers, 1984
- 32.6 Power System Analysis and Techniques - special reports and papers, 1984
- 32.7 Power System Operation and Control - special reports and papers, 1984
- 1.033 Materials re: High Voltage System Planning, 1925-1983
- 33.1 "Economic Comparison Between AC and DC Power Transmission for the Rail Belt in Alaska" (Lindh), 1968
- 33.2 AC/DC Economic Comparison, 1959-1975
- 33.3 Cost Analysis, 1925-1973
- 33.4 System Planning - papers, 1964-1983
- 33.5 Use of Digital Analyzer/Simulator, 1962-1970
- 1.034 Materials re: High Voltage Reliability, 1962, 1965-1967
- 34.1 Northeast Blackout of Nov 1965 - Reports, Wanapum Load Rejection Data, "Northwest Power Pool Load Dropping During Pool Emergencies 1965-66 Program", 1962 1965
- 34.2 Federal Power Commission - Northeast Power Blackout, 1965
- 34.3 "Eastern New York - New England Power System Behavior During the Northeast Power Interruption of November 9, 1965 - Report to Federal Power Commission" (Eastern New York - New England System Studies Group), 1966

- 34.4 Material on the Northeast Blackout of 1965, 1965-1967
- 1.035 Materials re: High Voltage Reliability, 1972-1973
- 35.1 "Report of Bay Ridge and Richmond Hill Network Shutdowns During July 1972" (Consolidated Edison Co.), 1973
- 35.2 "Report of Preliminary Investigations of the Bay Ridge and Richmond Hill Networks of the Con Edison System" (Debrosky, Eich), 1972
- 35.3 Richmond Hill Area Shutdown - Correspondence and Report, 1972-1973
- 1.036 Materials re: High Voltage Reliability, 1970-1973, 1977
- 36.1 Con Edison Consulting File - 1972 Service Interruption, distribution evaluation committee, 1970-1973
- 36.2 Con Edison Blackout - Reports, 1977
- 1.037 Materials re: High Voltage Reliability, 1966
- 37.1 "Reliability of Bulk Electric Power Supply" - a Report to the Federal Power Commission by the Advisory Committee on Reliability of Electric Bulk Power Supply + Appendices A-E + comments for revision, Dec 1, 1966
- 37.2 "Reliability of Bulk Electric Power Supply" - a Report to the Federal Power Commission by the Advisory Committee on Reliability of Electric Bulk Power Supply + Appendices A-I, Dec 1, 1966
- 37.3 "Reliability of Bulk Electric Power Supply" - a Report to the Federal Power Commission by the Advisory Committee on Reliability of Electric Bulk Power Supply + missing Appendix E, Dec 19, 1966
- 1.038 Materials re: High Voltage Reliability, 1966-1969
- 38.1 "Reliability of Bulk Electric Power Supply" - a Report to the Federal Power Commission by the Advisory Committee on Reliability of Electric Bulk Power Supply - drafts of appendices, correspondence, correction, 1966
- 38.2 Federal Power Commission Advisory Committee - meetings, 1966
- 38.3 Final Report - Reliability of Electric Bulk Power Supply, 1967
- 38.4 BPA - Reliability of Power Supply for Federal Power Commission, 1967-1969
- 1.039 Materials re: High Voltage Reliability, 1963-1966
- 39.1 Federal Power Commission - National Power Survey, 1963-1964
- 39.2 Advisory Committee Minutes & Reports, Nov. 1965 - Mar. 1966
- 39.3 Advisory Committee Minutes & Reports, Apr. 1966 - May 1966
- 1.040 Materials re: High Voltage Reliability, 1966-1968
- 40.1 Advisory Committee Minutes & Reports, Jun. 1966 - Oct. 1966
- 40.2 Advisory Committee Minutes & Reports, Nov. 1966 - Feb. 1968
- 1.041 Materials re: High Voltage Reliability, 1967, 1977
- 41.1 FPC Electric Power Reliability Act - comments on (1/2), 1967
- 41.2 FPC Electric Power Reliability Act - comments on (2/2), 1967
- 41.3 Prevention of Power Failures - Report to the Commission - Volumes I - III, 1967
- 41.4 Statement of Charles B. Curtis to Joint Committee on Defense Production concerning Vulnerability of Electric Utility Systems, 1977
- 1.042 Materials re: High Voltage Reliability, 1973, 1975, 1977-1978
- 42.1 "Distribution Evaluation Committee Report" (Consolidated Edison Co.), May 1973
- 42.2 "Coordination of Northwest Power Pool Load Shedding Program with Abnormal Frequency Capability of Nuclear Power Plants" (Starr et al), 1975
- 42.3 "National Electric Reliability Council - 7th Annual Review of Overall Reliability and Adequacy of the North American Bulk Power Systems, 1977
- 42.4 "Status of Emergency Load Shedding Studies" (Mittelstadt), 1977
- 42.5 Northwest Power Pool Load Shedding Program, 1977-1978
- 42.6 5th Annual Reliability Engineering Conference - BPA - brochures, 1978
- 1.043 Materials re: High Voltage Reliability, 1969-1983 undated
- 43.1 Reliability and Design Criterion from: Western Systems Coordinating Council, BPA, and North American Electric Reliability Council,
- 43.2 IEEE Reliability of Bulk Power Supply - panel discussion, 1966
- 43.3 BPA Reliability Board, 1973
- 43.4 Security Assessment of Power Systems - Progress Report (Purdue), 1980
- 43.5 "National Electric Power Grid Assessment Program - Phase I" (Boeing), 1982

- 43.6 System Reliability, 1969-1983
- 1.044 Materials re: High Voltage Reliability, 1979-1980, 1982
- 44.1 BPA "Reliability Criteria and Standards" - 2 copies, 1979
- 44.2 BPA "Reliability Criteria and Standards", 1980
- 44.3 "IEEE Tutorial Course - Power System Reliability Evaluation", 1982
- 1.045 Materials re: Biological Effects of High Voltage Electricity, 1968, 1970-1972, 1976
- 45.1 Induced Voltages in EHV Lines - work for KG&E + papers on Induced Voltages (Poland), 1968
- 45.2 "Project RP98 - Biological Effects of Exposure to High Intensity Electric Fields" (Edison Electric Institute) - proposal and progress reports, 1970-1971
- 45.3 "Project RP98 - Biological Effects of Exposure to High Intensity Electric Fields" (Edison Electric Institute) - progress reports, 1972
- 45.4 "Biological Effects of High Strength Electric Fields on Small Laboratory Animals - Interim Progress Report" (Battelle NW), Sep 1976
- 45.5 "Effects of Electric Fields on Large Animals" (Battelle NW), Dec 1976
- 1.046 Materials re: Biological Effects of High Voltage Electricity, 1977
- 46.1 "Selected Biological Parameters Associated with \pm 400 kV DC Transmission Line in Oregon" (Griffith) - 2 copies, 1977
- 46.2 "Effects of Electric Fields on Large Animals - Second Interim Report", Mar 1977
- 46.3 "Biological Effects of Static and Low Frequency Electromagnetic Fields: an Overview of U.S. Literature" (Battelle NW), Apr 1977
- 46.4 "Biological Effects of High Strength Electric Fields - Second Interim Progress Report" (Battelle NW), May 1977
- 1.047 Materials re: Biological Effects of High Voltage Electricity, 1977-1979
- 47.1 Effect of Transmission Lines on Bird Flight and Mortality - BPA Report (Meyer), 1978
- 47.2 "Design, Construction and Testing of a DC BioEffects Test Enclosure for Small Animals" (Battelle NW), Jun 1978
- 47.3 Lyons 1100/1200 kV UHV Test Program - Biological Effects study, 1977-1979
- 1.048 Materials re: Biological Effects of High Voltage Electricity, 1977-1983
- 48.1 "Biological Effects of Electric Fields" - study by Battelle NW - papers and correspondence, 1977-1978
- 48.2 "Biological Effects of Electric Fields" - study by Battelle NW - papers and correspondence, 1979-1983
- 1.049 Materials re: Biological Effects of High Voltage Electricity, 1940, 1966-1973
- 49.1 Biological Effects of Electric Fields - papers and reports, 1940 1966-1972
- 49.2 Biological Effects of Electric Fields - papers and reports, 1973
- 1.050 Materials re: Biological Effects of High Voltage Electricity, 1974-1984
- 50.1 Biological Effects of Electric Fields - papers and reports, 1974-1975
- 50.2 Biological Effects of Electric Fields - papers and reports, 1976-1978
- 50.3 Biological Effects of Electric Fields - papers and reports, 1979-1984
- 1.051 Materials re: Lightning Protections for High Voltage Electricity Systems, 1926, 1930, 1939-1940, 1944
- 51.1 "Investigation of Current in Stroke of Natural Lightning" (EC Starr) - handwritten report for GE + typed copy w/figures, 1926
- 51.2 "Investigation of Photograph of Stroke of Natural Lightning" (EC Starr), 1926
- 51.3 "The Influence of Polarity of High-Voltage Discharges" (McMillan & Starr), 1930
- 51.4 Radio Round Table Discussions on Lightning, Common Electrical Hazards, and Innovations, 1939-1940
- 51.5 "Lightning Sparkover Characteristic of High Voltage Lines and the Probability of Transmission Line Outages" (EC Starr) - notes, materials, calculations, 1944
- 51.6 "Lightning Sparkover Characteristic of High Voltage Lines and the Probability of Transmission Line Outages" (EC Starr) - draft, 1944
- 51.7 "Lightning Sparkover Characteristic of High Voltage Lines and the Probability of Transmission Line Outages" (EC Starr) - final draft, 1944
- 1.052 Materials re: Lightning Protections for High Voltage Electricity Systems, 1920-1932, 1976
- 52.1 Lightning Protection - data and figures, undated
- 52.2 "Lightning Protection of Distribution Systems" (Starr) draft and figures, 1920-1930
- 52.3 Impulse Generator - figures, photos, 1929-1931

- 52.4 Lightning Arresters for the Protection of Distribution Systems - articles, conference papers and brochures, 1930-1932
- 52.5 "Lightning Protection of Distribution Systems" (EC Starr), 1932
- 52.6 Lightning Protection - figures, drawings, photostats, negatives, 1932
- 52.7 "A Most Unusual Lightning Observer" (EC Starr), 1976
- 1.053 Materials re: Lightning Protections for High Voltage Electricity Systems, 1926-1930, 1936-1939, 1941-1946 undated
- 53.1 Negatives for Prints in Lightning Investigation Progress Report, undated
- 53.2 "Analysis of Lightning Arrester Test Data" (EC Starr), undated
- 53.3 "An Investigation of Lightning and its Relation to Forest Protection" (McMillan & Starr) - multiple drafts + materials, 1926-1928
- 53.4 Lightning Investigation - Expense Accounts, 1928-1929
- 53.5 Lightning Investigation - correspondence and materials, 1928-1930
- 53.6 Lightning, 1936-1939
- 53.7 Lightning Study Report - EC Starr draft notes , 1941-1946
- 1.054 Materials re: Lightning Protections for High Voltage Electricity Systems, 1935, 1943-1944, 1951-1983
- 54.1 "Some Polarity Characteristics of Sphere Gap Sparkover" (Biele, Pugsley), 1935
- 54.2 "Transmission Line Flashover Detector" (Scarborough, Kinyon) + photos, data and letter, 1943-1944
- 54.3 "A Lightning Stroke Pathfinder" (Armstrong, Whitehead), 1963
- 54.4 Pathfinder Research Project - Mechanism of Lightning Flashover - monthly reports, Jan 1965 - Jun 1966
- 54.5 Pathfinder Research Project - Final Report Phase II (Whitehead), Supplement (Armstrong, Whitehead), Expanded Summary, 1964-1966
- 54.6 "Current Status Report on the EEI Research Project Mechanism of Lightning Strokes to Transmission Lines" (EEI, IITRI), 1967
- 54.7 EEI & IITRI Study w/ BPA - Mechanism of Lightning Flashover, 1966-1971
- 54.8 Earth Grounding, 1951-1983
- 1.055 Materials re: Lightning Protections for High Voltage Electricity Systems, 1927-1983
- 55.1 Lightning Arresters, 1928
- 55.2 Instruments for Recording Lightning Currents, 1939
- 55.3 "Lightning Electromagnetic Environment and Laboratory Reproduction Techniques - Applications in Hazard Reduction Researches for Aerospace Vehicle System" (Newmann, et al.), 1964
- 55.4 "An Investigation of the Lightning Elimination and Strike Reduction Properties of Dissipation Arrays - Final Report" (Bent, Llewellyn), 1976
- 55.5 Lightning Protection - buildings, people, transmission lines, 1927-1979
- 55.6 "Electric Forum - Distribution System Protection", 1982
- 55.7 Surge Arresters - papers, 1930-1983
- 1.056 Materials re: Lightning Protections for High Voltage Electricity Systems, 1927-1984
- 56.1 Electrical Engineering - w/letter to editor by Starr "Electric Shock Induced by Lightning Stroke" + correspondence and draft, 1941-1942
- 56.2 "The Brown Boveri Review - Vol. 40" w/article on impulse breakdown of sphere-gaps, 1953
- 56.3 Lightning and Surges - summary of discussion, 1965
- 56.4 Lightning and Surges - summary of discussions, 1968
- 56.5 Ball Lightning - ten articles, 1960-1969
- 56.6 American Scientist - Article on Ball Lightning (Finkelstein & Powell), May-June 1970
- 56.7 Lightning Studies - papers, 1927-1983
- 56.8 Protections - special reports, 1974 1984
- 1.057 Materials re: High Voltage Electrical Cables and Insulation, 1931, 1934-1966
- 57.1 "Overhead Conductor Vibration" (Monroe), 1931
- 57.2 "Electrical Characteristics of A. C. S. R." (Aluminum Company of America), 1934
- 57.3 "Performance Charts for 60-Cycle Transmission Lines" (General Electric), 1939
- 57.4 "Conductors and Accessories Data" (BPA), 1941
- 57.5 "A.C.S.R. 220,000-Volt Transmission Lines in the United States and Canada" (Aluminum Company of America), 1941
- 57.6 "Electrical World - A Special Engineering Report - Insulated Aluminum Wire and Cable", 1947
- 57.7 "An Analysis of Conductor Vibration Field Data" (Steidel, Jr., Elton), 1951

- 57.8 "Research on Tension and Torsion of Cable (Theory and Experiment)" (Otsuki), 1959
- 57.9 "Swinging Motion of Jumper on Overhead Lines" (Sakamoto, Otsuki), 1963
- 57.10 "Theory of Statistical Analysis of Distributed Constant Corollary and Studies on Problems with Transmission Lines Resulting from Wind" (Ohtsuki), 1963
- 57.11 Transmission Line / Overhead Conductors data, 1935-1966
- 57.12 Bare Conductors and Mechanical Calculations of Overhead Lines - correspondence, 1958-1966
- 57.13 Bare Conductors and Mechanical Calculations of Overhead Lines - papers, 1960-1966
- 57.14 "Working Group: Overhead Conductors and Line Insulation" - presentation by Starr, 1967
- 1.058 Materials re: High Voltage Electrical Cables and Insulation, 1968-1976, 1984 undated
- 58.1 "Dimensional Data - Okolite-Okoprene Wires and Cables" (Okonite), undated
- 58.2 "Power Line Carrier Equipment" (Westinghouse), undated
- 58.3 "Conductor Creep and Transmission Line Construction" - for CIGRE SC #22, 1970
- 58.4 "Remarks on the Mechanical Calculations Pertaining to Conductors in Aerial Electrical Lines" - Italian Paper, parts I-IV + translations, 1971
- 58.5 US-USSR Technical Exchange of Transmission Line Data, 1972
- 58.6 Cables - papers, 1968-1974
- 58.7 IEEE Papers on Subsynchronous Resonance, 1975
- 58.8 "Analysis and Control of Subsynchronous Resonance" (IEEE), 1976
- 58.9 Overhead Lines - special reports and papers, 1974 1984
- 1.059 Materials re: High Voltage Electrical Cables and Insulation, 1928-1973, 1975, 1982-1983, 1985 undated
- 59.1 Cables, 1928-1973
- 59.2 "The Development of Low Cost Preservative Treatments for Rural Line Poles" (Brown), 1936
- 59.3 DC Transmission Line Data, 1938-1940
- 59.4 "Grouped Conductors" (Siemens - Schuckertwercke) - translation - 2 copies, 1948
- 59.5 "Economics of Single and Bundle Conductors for Extra-High Voltage Transmission" (Abetti, Lindh, Simmons, Jr.), 1960
- 59.6 Towers, 1960-1962
- 59.7 Towers and Foundations, 1968
- 59.8 "EHV Structures" (Hughes Brothers), 1975
- 59.9 "Italy/USA Joint UHV Workshop - Working Group C - Substations and Cables - Portland, OR", Jul 1982
- 59.10 Metal Transmission Structures, 1983 1985
- 1.060 Materials re: High Voltage Electrical Cables and Insulation, 1964-1970, 1972-1983
- 60.1 IEC - TC28: Insulation Coordination, 1964-1967
- 60.2 Insulation Coordination - papers, 1969-1970
- 60.3 ANSI Committee C92 - meeting minutes, 1972-1974
- 60.4 American National Standards (ANSI) Committee on Insulation Coordination, C92, 1972-1983
- 1.061 Materials re: High Voltage Electrical Cables and Insulation, 1946-1953, 1960-1984
- 61.1 Insulating Materials, 1962-1984
- 61.2 HV Insulated Cable - special reports and papers, 1960-1984
- 61.3 Insulation Coordination - special reports and papers, 1973-1984
- 61.4 Insulation - AIEE Coordinating Committee No. 8 on Basic Insulation Levels, 1946-1953
- 1.062 Materials re: High Voltage Electrical Cables and Insulation, 1915-1926, 1940-1968
- 62.1 Insulation - notes and drawings, 1915-1926
- 62.2 Insulation - papers, reports, and studies, 1940-1968
- 1.063 Materials re: High Voltage Electrical Cables and Insulation, 1969-1984
- 63.1 Insulation - papers, reports, and studies, 1969-1984
- 1.064 Materials re: High Voltage Electrical Cables and Insulation, 1948, 1962, 1966-1973
- 64.1 Insulation Coordination, 1962 1968
- 64.2 Insulation contamination/unexplained flashover including: bird caused flashovers, 1948 1966-1969
- 64.3 Flashover Criteria Task Force - BPA Engineering Review Board (unexplained outages and flashover materials), 1968-1973
- 1.065 Materials re: High Voltage Electrical Cables and Insulation, 1924, 1926, 1963-1976 undated
- 65.1 "Sectional Committee for Electrical Safety Code - Test on Pin Type Insulators" (Westinghouse), 1924

- 65.2 "Capacitance Measurements on Various Makes of Suspension, Pedestal, and Pin Type Insulators" - laboratory report (General Electric), 1926
- 65.3 Flashover and Impulse Characteristics of Insulators, 1963-1969
- 65.4 HVDC Insulation Tests (Electricite de France), undated
- 65.5 Insulators, 1968-1976
- 1.066 Materials re: Radio Interference and Corona of High Voltage Transmission Lines, 1925-1927, 1941-1942, 1945
- 66.1 "Condenser Dielectric Loss at High Frequency and Low Potential Stress" (EC Starr), 1925
- 66.2 "The Structural Nature of Corona Loss" (EC Starr), 1925
- 66.3 Corona (EC Starr) - figures and graphs, 1926
- 66.4 "Influence of Altitude on Atmospheric Ionizing Gradient" (EC Starr), 1941-1942
- 66.5 "Evaluation of Transmission-System Resistance and Corona Power Losses" (EC Starr), 1945
- 66.6 "Radio Interference from Conductor Corona" (EC Starr) - two drafts, 1945
- 66.7 Corona Loss Studies (EC Starr) - figures and graphs, 1926-1927 1945
- 1.067 Materials re: Radio Interference and Corona of High Voltage Transmission Lines, 1931-1947, 1958-1964, 1966-1983 undated
- 67.1 Radio Interference and Corona Papers, undated
- 67.2 Radio Interference and Corona Papers, 1931-1947
- 67.3 Radio Interference and Corona Papers, 1958-1964
- 67.4 Radio Interference and Corona Papers, 1966-1969
- 67.5 Radio Interference and Corona Papers, 1970-1977
- 67.6 Radio Interference and Corona Papers, 1978-1979
- 67.7 Radio Interference and Corona Papers, 1980-1983
- 1.068 Materials re: Radio Interference and Corona of High Voltage Transmission Lines, 1964-1965
- 68.1 "High-Voltage Direct Current Development Program - First Fair Weather Corona Loss and Radio Interference Measurements on Energized Test Line" (BPA), 1964
- 68.2 "High-Voltage Direct Current Development Program - Corona Loss Performance at ± 400 kV" (BPA), 1965
- 68.3 "High-Voltage Direct Current Development Program - Corona Source Inspections" (BPA), 1965
- 68.4 "High-Voltage Direct Current Development Program - Night Photography and Corona Observations on Energized Test Line Part I - Main Specimen Line - Steel Tower Section" (BPA), 1965
- 68.5 "High-Voltage Direct Current Development Program - R.I., Corona Loss, and Insulator Leakage ± 400 kV Operation" (BPA), 1965
- 68.6 "High-Voltage Direct Current Development Program - Signal-To-Noise Ratio Tests HVDC" (BPA), 1965
- 1.069 Materials re: Radio Interference and Corona of High Voltage Transmission Lines, 1919, 1944-1945, 1950-1956, 1961-1962, 1968, 1976, 1978
- 69.1 "University of Illinois Bulletin - Corona Discharge" (Warner, Kunz), 1919
- 69.2 "Corona Losses for Weathered Conductors" (Carroll), 1944
- 69.3 Corona Radiation Tests - reports, data, correspondence & Corona and Radio Noise Tests, 1944-1945 1950-1956
- 69.4 "Investigation of Corona on Overhead Transmission Line Conductors at High Voltage D.C. - A Progress Report" (Morris, Pedersen) , 1961
- 69.5 "Investigation of Corona on Overhead Transmission Line Conductors at High Voltage D. C. - A Progress Report on Radio Interference" (Rakosh Das, Morris), 1962
- 69.6 "RI Tests on B. C. Hydro's Four Conductor Bundle 500 kV AC Line (Portage Mountain-Williston Section)" (BPA), 1968
- 69.7 "High-Voltage Direct-Current Transmission Radio Noise, Corona Loss, and Insulator Leakage" (BPA), 1968
- 69.8 "Recommended Guide for Measurement of Electrical Noise and Harmonic Filter Performance of High-Voltage Direct-Current Systems" (IEEE), 1976
- 69.9 "Corona Performance of the Bonneville Power Administration HVDC Test Line to ± 600 kV" (Bracken et al) -2 copies, 1978
- 69.10 "Progress Report D.C. Corona Measurements on Transmission Line Conductors" (Morris, Morse), 1968
- 1.070 Materials re: Radio Interference and Corona of High Voltage Transmission Lines, 1911-1912, 1942, 1966-1984
- 70.1 "The Law of Corona and the Dielectric Strength of Air" Parts I-III (Peek), 1911-1912
- 70.2 "Response of Tuned Circuit to Various Transients" - multiple drafts + materials, unknown author, 1940s
- 70.3 "American Standard for Measurement of Test Voltage in Dielectric Tests" (AIEE), 1942
- 70.4 Single Pole Reclosing, 1966-1976

- 70.5 Fault Studies, 1967-1983
- 70.6 Interference - special reports and papers, 1974 1984
- 1.071 Materials re: Transformers Used in High Voltage Transmission Systems, 1920-1929, 1930, 1938, 1963-1966
- 71.1 Lectures on Magnetic Steel (General Electric), 1924
- 71.2 "Rogowski Equations as Applied to Transformer" (Shildneck), 1926
- 71.3 "Tests on Constant-Current Transformers in La Grande Substation of Eastern Oregon Light and Power Company" (EC Starr) - report, materials, 1930
- 71.4 Three-Winding Transformers - Photostats of papers by Bergval, Peters + foreign article (Ziegler), 1920-1929 1938
- 71.5 VEPCO 500 kV Transformer Failure - consulting assignment, 1963-1966
- 1.072 Materials re: Transformers Used in High Voltage Transmission Systems, 1965-1974
- 72.1 Elin - test reports, transformer failure, drawings, and calculations, 1965-1967
- 72.2 Transformers (EHV) - failure reports & testing, 1967-1974
- 1.073 Materials re: Transformers Used in High Voltage Transmission Systems, 1968-1976
- 73.1 Power System Oscillations, 1970
- 73.2 Specifications for EHV and UHV transformers, 1971-1974
- 73.3 Partial Discharge Corona Transformer Testing + Testing of Spacer Damper and Insulators - studies, papers, etc., 1968-1976
- 1.074 Materials re: Transformers Used in High Voltage Transmission Systems, 1971-1977, 1979
- 74.1 Corona Testing Requirements of 230kV and 500kV Transformers incl. Contract w/Westinghouse, 1971-1975
- 74.2 General Electric 345 kV Auto Transformer T-1518 - correspondence, 1976-1977
- 74.3 Lyons 1100/1200 kV Test Program - transformer failure reports, 1979
- 1.075 Materials re: Transformers Used in High Voltage Transmission Systems, 1930-1966, 1969-1983
- 75.1 Transformers - papers and reports, 1930-1966
- 75.2 Transformers - papers and reports, 1969-1983
- 1.076 Materials re: Transformers Used in High Voltage Transmission Systems, 1941, 1947, 1950-1984 undated
- 76.1 "Power Transformers" (General Electric), undated
- 76.2 "Influence of Generator Transient Reactance on the Approximate Power Limit of an Uncompensated, 200-Mile, 230-kV Transmission Line" (EC Starr) - paper and materials, 1947
- 76.3 Synchronous Reactors - tests, reports, notes, 1941 1950-1954
- 76.4 Synchronous Machines - papers, 1971-1983
- 76.5 Power Generators, 1950-1983
- 76.6 Transformers - special reports and papers, 1960-1984
- 76.7 Generators, Alternators, Rotating Machines - special reports and papers, 1962-1984
- 1.077 Materials re: Circuit Breakers Used in High Voltage Transmission Systems, 1940-1984 undated
- 77.1 Circuit Breakers - figures and negatives, undated
- 77.2 "High-Speed Circuit Breaker Rating" (EC Starr) - multiple drafts and materials, 1951
- 77.3 "High Voltage Circuit Interruption" - presentation given by Starr, 1953
- 77.4 "A New Basis for Rating Power Circuit Breakers" (AIEE Working Group) - formal discussion document, materials, and correspondence, 1954
- 77.5 Circuit Breakers - special report and papers, 1966
- 77.6 Trip to Fontenay, France to observe circuit breaker testing - correspondence, calculations, data, 1966
- 77.7 Cogenel, Inc. Delle Circuit Breakers - correspondence and failure reports, 1965-1970
- 77.8 Circuit Breaker File - papers, 1940-1972
- 77.9 Circuit Breaker File - papers, 1973-1983
- 77.10 Switching Equipment (circuit breakers) - special reports and papers, 1960-1984
- 1.078 Materials re: Circuit Breakers Used in High Voltage Transmission Systems, 1951-1953, 1975, 1979-1980 undated
- 78.1 "Brown-Boveri Circuit Breaker Tests - 230 kV Air-Blast Circuit Breaker", 1951
- 78.2 Circuit Breaker Field Tests (GE), 1951
- 78.3 Circuit Breaker Interruption Rating - correspondence, papers, and discussion, 1951-1952
- 78.4 Oerlikon Line Dropping and Fault Tests, 1951-1953
- 78.5 Circuit Breaker Testing, 1975, 1979
- 78.6 "Field Test of Westinghouse Metallic Return Transfer Breaker at Celilo Converter Station October 23-24, 1980", 1980

- 78.7 Breaker Test Oscillographs from Grand Coulee, undated
- 1.079 Materials re: Circuit Breakers Used in High Voltage Transmission Systems, 1948-1974 undated
- 79.1 "Pacific Oerlikon Oil Circuit Breaker Tests - Volume II", 1951
- 79.2 Interruption Tests, 1948-1974
- 79.3 Grand Coulee Breaker Test Oscillographs, undated
- 1.080 Materials re: Circuit Breakers Used in High Voltage Transmission Systems, 1950, 1961, 1966-1983 undated
- 80.1 "Report of High Power Laboratory Tests 230/196 kV GM-6 10,000 mVA Oil Circuit Breaker" (Westinghouse), 1950
- 80.2 "Effect of Breaker Resistance on 230 kV Line Switching Transients" (BPA), 1961
- 80.3 "DC Circuit Breaker Development from Hughes Research Laboratories" - proposal, 1967
- 80.4 "Technical Proposal for the Development of a Prototype HVDC Breaker" (General Electric), 1974
- 80.5 Switching Surges - papers, 1966-1983
- 1.081 Materials re: Circuit Breakers Used in High Voltage Transmission Systems, 1959-1969, 1971-1986
- 81.1 "Development of Liquid Metal Plasma Valves" (EDRA-Hughes), 1975
- 81.2 "IEEE Power Engineering Review - September 1983" [includes article on new solid state valves for HVDC],
- 81.3 Converter Valves - papers, 1959-1967
- 81.4 Converter Valves - papers, 1968
- 81.5 Converter Valves - papers, 1969
- 81.6 Converter Valves - papers, 1971-1986
- 1.082 Materials re: Circuit Breakers Used in High Voltage Transmission Systems, 1960-1984
- 82.1 BPA - Specifications for HVDC Converter Terminals - Request for Proposals, 1965
- 82.2 AC-DC Converting Plants - special reports and papers, 1968-1969
- 82.3 "SF6 Gas Insulated Substations Assessment and Recommendations" (H. C. Ramberg and M.A. Currie), 1976
- 82.4 Background Material on Engineering & Design Aspects of the Taft Gas Insulated Substation, 1983
- 82.5 Substations/Converter Stations, 1960-1983
- 82.6 Substations - special reports and papers, 1974 1984
- 1.083 Materials re: Capacitors Used in and Stability of High Voltage Transmission Systems, 1926, 1943, 1951, 1953, 1957, 1973, 1979 undated
- 83.1 Untitled draft on stability - handwritten notes and calculations, undated
- 83.2 "A - C Transmission Power Flow Control" (EC Starr) - 8 copies, undated
- 83.3 "A Study of Traveling Waves" (EC Starr) - multiple drafts, 1926
- 83.4 Series Capacitor papers by Starr - drafts, 1940s
- 83.5 "Power Limit and Stability of Transmission Systems" (EC Starr) - two drafts, 1943
- 83.6 "Economic Aspects of Series Capacitors in High Voltage Transmission" (Seymour, Starr) - 4 copies, 1951
- 83.7 Functional Requirements of Series Capacitors in Long Distance Transmission Lines and a Description of Fundamental Features of the Installation in the Bonneville Power Administration System" (Dojnikov, Starr) - 2 copies, 1951
- 83.8 Shunt Capacitors in Large Transmission Networks (Starr, Harrington), 1953
- 83.9 "Transmission Stability" (EC Starr) - drafts and figures, 1957
- 83.10 "Pacific Intertie Series Capacitors, Oregon Section" (EC Starr) - 5 copies, 1973
- 83.11 "Experience with 500 kV Series Capacitor Installations and New Protection Schemes on the BPA System" (Starr, Courts) -1980 CIGRE paper and correspondence, 1979
- 1.084 Materials re: Capacitors Used in and Stability of High Voltage Transmission Systems, 1930-1980
- 84.1 Capacitor notes, figures, and data, 1930-1980
- 84.2 Capacitor Information - reports, memos, data, 1935-1949
- 84.3 Capacitor Information - reports, memos, data, 1950-1968
- 1.085 Materials re: Capacitors Used in and Stability of High Voltage Transmission Systems, 1936-1969, 1971-1977
- 85.1 Capacitor correspondence, 1936-1969
- 85.2 Capacitor Information - reports, memos, data, 1971-1975
- 85.3 Capacitor Information - reports, memos, data, 1976-1977
- 1.086 Materials re: Capacitors Used in and Stability of High Voltage Transmission Systems, 1926-1927, 1940, 1978-1980 undated
- 86.1 "A Mechanical Analogy to the Problem of Transmission Stability" (Griscom), 1926
- 86.2 "Static Stability Limits and the Intermediate Condenser Station" (Wagner, Evans), 1927

- 86.3 "Stability Limitations of Long-Distance A-C Power Transmission Systems" (GE), 1940
- 86.4 Capacitor Information - reports, memos, data, 1978-1980
- 86.5 Capacitor Information + 2 photos, undated
- 1.087 Materials re: Capacitors Used in and Stability of High Voltage Transmission Systems, 1921, 1928, 1945-1953, 1967-1968, 1973, 1980
- 87.1 McNary Generator Stability Study, 1945-1953
- 87.2 Western Systems Coordinating Committee - control equipment for excitation systems, 1967-1968
- 87.3 Report to WSCC Loop Flow Working Group on the Midway-Vincent Phase Shifter Stability Evaluation, 1973
- 87.4 Intermediate Condensers - articles, reports, 1921 1928 1980
- 1.088 Materials re: Capacitors Used in and Stability of High Voltage Transmission Systems, 1947-1949, 1952-1953, 1957, 1969-1978, 1981-1984
- 88.1 Series Capacitors - Chehalis, 1947-1949
- 88.2 Rocky Ford Series Capacitors (Ev Harrington's File), 1952-1953
- 88.3 Use of Series Capacitors in Sweden, 1957
- 88.4 Bakeoven Series Capacitors - tests and reports, 1969-1978
- 88.5 Garrison Series Capacitor Installation - contract, reports, correspondence, 1981-1984
- 1.089 Materials re: Capacitors Used in and Stability of High Voltage Transmission Systems, 1948-1953, 1964, 1973-1976
- 89.1 "Proposal - 230 kV Series Capacitor Equipment for City of Los Angeles Owens George Project" (Westinghouse Electric Corp.), 1948
- 89.2 "Descriptive and Performance Specifications - Outdoor Series Capacitor Equipment for BPA Invitation No. 4679" (General Electric), 1949
- 89.3 Proposal for BPA Invitation Number 4679 Outdoor Series Capacitor Equipment (Westinghouse), 1949
- 89.4 Proposal for Outdoor Series Capacitor Equipment of BPA Invitation No. 4679 (I-T-E Circuit Breaker Company), 1949
- 89.5 "Addendum No. 4 to Invitation No. 5155" (BPA), 1950
- 89.6 Bibliography on Power Capacitors, 1951
- 89.7 Series Capacitor Testing, 1952
- 89.8 Line Dropping Restrike Performance Tests - Capacitor Breaker Tests and Reports, 1952-1953
- 89.9 "Proposal for Shunt Capacitor Equipment Invitation No. 6894" (Westinghouse Electric Corp.), 1953
- 89.10 "Capacitor Evaluation Tests April - July 1963 (Partington, BPA), 1964
- 89.11 "Transmission - a magazine for electric utilities - Transmission Line Compensation Issue" (General Electric), 1973
- 89.12 "NGH Series Capacitor Protection Scheme Invitation No. 4321- Unit 2 - Administrative Provisions" (BPA), 1973
- 89.13 "Solicitation, Offer, and Award No. 4321 for NGH Series Capacitor Protection Scheme" (BPA), 1974
- 89.14 "Results of Subsynchronous Resonance Test at Mohave" (Walker et al), 1975
- 89.15 "Development of a 1200 kV Ceramic Oxide Voltage Limiter for Power Systems Applications - Fourth Quarter Progress Report" (Sweetana, Westinghouse), 1976
- 1.090 Materials re: Capacitors Used in and Stability of High Voltage Transmission Systems, 1951-1953, 1960, 1962, 1972-1973, 1975-1981
- 90.1 AIEE Working Group on Volt-Time Characteristics of Capacitors - Short-Time 60-cycle Overvoltages, 1951-1953
- 90.2 Sangamo's Third Annual Power Capacitor Seminar - Starr gave presentation "Use of Capacitors on High Voltage Transmission Systems" - Springfield, IL, 1960
- 90.3 Sangamo's Fifth Annual Power Capacitor Seminar - Starr gave presentation "Use of Capacitors on High Voltage Transmission Systems" - Springfield, IL + Springfield visitors guides, 1962
- 90.4 Series Capacitor meetings, 1972-1973
- 90.5 IEEE Capacitor Subcommittee - ANSI Standards for Series Capacitors - drafts w/revisions, 1973
- 90.6 IEEE Summer Power Meeting - Capacitor Session - papers, correspondence, slides, 1973
- 90.7 IEEE Capacitor Subcommittee - Bibliography on Power Capacitors, 1975-1981
- 1.091 Materials re: Capacitors Used in and Stability of High Voltage Transmission Systems, 1924-1936, 1940-1949
- 91.1 Capacitor papers, 1924-1936
- 91.2 Capacitor papers, 1940-1949
- 1.092 Materials re: Capacitors Used in and Stability of High Voltage Transmission Systems, 1950-1953, 1960-1969

- 92.1 "Capacitor - Excited Induction Generator" (Laughlin) - masters thesis, 1950
- 92.2 Capacitor papers, 1951-1953
- 92.3 Capacitor papers, 1960-1969
- 1.093 Materials re: Capacitors Used in and Stability of High Voltage Transmission Systems, 1972-1978, 1980-1983
- 93.1 Capacitor papers, 1972-1978
- 93.2 Capacitor papers, 1980-1983
- 1.094 Materials re: Underground Transmission of High Voltage Electricity, 1931, 1938-1972
- 94.1 Rome Trenchlay Non-Metallic Sheathed Underground Cables + Cable Failure Test, 1931 undated
- 94.2 HV Submarine Cable including "Spokane Fault Test Report" (Purviance), 1952
- 94.3 "Proposed Research Projects - EHV AC and DC Underground Transmission Task Force" (Electrical Research Council), 1965
- 94.4 Underground Power Transmission, 1938-1965
- 94.5 Underground Power Transmission, 1965-1972
- 1.095 Materials re: Underground Transmission of High Voltage Electricity, 1968, 1970-1973, 1982-1983
- 95.1 "Superconducting Underground DC Power Transmission" (Merriam and Stern, Gulf General Atomic), 1968
- 95.2 "Underground Power Transmission" (Arthur D. Little, Inc.), 1972
- 95.3 Underground Utility Lines Program - City of Portland, 1970-1973
- 95.4 "Evaluation of Underground DC Transmission Systems" - 5th and 6th Technical Progress Reports (Philadelphia Electric Company), 1982-1983
- 1.096 Materials re: Underground Transmission of High Voltage Electricity, 1960-1963 undated
- 96.1 "The High-Voltage DC Transmission to Gotland" (ASEA), undated
- 96.2 Cross-Channel HVDC Transmission, 1960-1963
- 96.3 "Cross-Channel Power Link" (Central Electricity Generating Board), 1961
- 96.4 Electrical World "Special Report - Dc Transmission Around the World", 1962

Box

2. Precipitation-Static Reduction Research, 1931-1951 (11 boxes)

The materials in Series 2 date to Starr's major contributions toward eliminating weather-related static electricity interference as it pertained to radio communications in aircraft.

- 2.001 Precipitation-Static Reduction Research: Progress Reports by Eugene Starr, 1938, 1941-1942
- 1.1 "United Airlines Precipitation-Static Report", Jan. 1938
- 1.2 "Progress Report on C-21 Precipitation-Static Reduction Research" (Starr / Huggins), Jul. 1941
- 1.3 "Progress Report 2 on C-21 Precipitation-Static Reduction Research" (Starr / Huggins), Sep. 1941
- 1.4 "Progress Report 3 on C-21 Precipitation-Static Reduction Research" (Starr / Huggins), Nov. 1941
- 1.5 "Progress Report 4 on C-21 Precipitation-Static Reduction Research" (Starr / Huggins), Jan. 1942
- 1.6 "Progress Report 5 on C-21 Precipitation-Static Reduction Research" (Starr / Huggins), Mar. 1942
- 1.7 "Progress Report 6 on C-21 Precipitation-Static Reduction Research" (Starr / Huggins), May 1942
- 2.002 Precipitation-Static Reduction Research: Progress Reports by Eugene Starr, 1942-1943
- 2.1 "Progress Report 7 on C-21 Precipitation-Static Reduction Research" (Starr / Huggins), Jul. 1942
- 2.2 "Progress Report 8 on C-21 Precipitation-Static Reduction Research" (Starr / Huggins) + "Progress Report 9 on C-21 Precipitation-Static Reduction Research" (Starr / Huggins), 1942
- 2.3 "Precipitation-Static Reduction Research - Final Report" - copy 1, Mar. 1943
- 2.4 "Precipitation-Static Reduction Research - Final Report" - copy 2 + photos and notes, Mar. 1943
- 2.003 Precipitation-Static Reduction Research: Progress Reports by Eugene Starr, 1943
- 3.1 "Precipitation-Static Reduction Research - Final Report" (Starr / Huggins) - copy 3 - printer's draft, Mar. 1943
- 2.004 Precipitation-Static Reduction Research: Papers by Eugene Starr, 1938-1943
- 4.1 "Storm-Static Radio Interference Phenomena Originating on Aircraft" (EC Starr), 1938-1939
- 4.2 "High-Voltage Direct-Current Point Discharges" (EC Starr) - multiple drafts, 1939
- 4.3 "Aircraft Precipitation-Static Radio Interference" (EC Starr) - multiple drafts, 1939-1940
- 4.4 Aircraft Precipitation Static Materials, 1939-1942

- 4.5 "Precipitation-Static Research - Recommended Program for Immediate Improvement of Aircraft Radio Reception Under Precipitation-Static Conditions" (EC Starr), 1943
- 2.005 Precipitation-Static Reduction Research: Non-Starr Progress Reports, 1940-1943
 - 5.1 "A Progress Report on Elimination of Rain and Snow Static" (Slayter Electronics Corp.), ca. 1940
 - 5.2 "Preliminary Report on Atmospheric Electrical Discharges to Aircraft" (US Weather Bureau), 1941
 - 5.3 "First Partial Report on Precipitation Static Problem" (Naval Research Laboratory) - 2 copies, 1942
 - 5.4 "Report on the Radio-Influence Characteristics of Radioactivated Dischargers" (Canadian Radium & Uranium Corp.), 1942
 - 5.5 Precipitation Static Research - progress reports (University of New Mexico), 1942-1943
 - 5.6 "Progress Report No. 2 - Study of the Effect of Aircraft Surface Treatment on Electrical Charges Causing Precipitation Static" (Purdue University), 1943
 - 5.7 Progress Reports - Precipitation Static Research (United Airlines), 1943
- 2.006 Precipitation-Static Reduction Research: Non-Starr Progress Reports, 1938-1939, 1942-1943
 - 6.1 Refrigerated Wind Tunnel Tests - Icing Test of Radio Equipment for American Airlines (B.F. Goodrich Company), 1938
 - 6.2 "A Laboratory Investigation of Precipitation Static" (Purdue University), 1939
 - 6.3 "Report on Preliminary Tests on the Radio-Influence Characteristics of a Radioactivated-Point Discharger" (Huggins), 1942
 - 6.4 "Radio Noise of Precipitation-Static Origin" (Consolidated Vultee), 1943
 - 6.5 "A Report on Precipitation-Static Reduction Research" (Huggins) - multiple drafts, 1943
- 2.007 Precipitation-Static Reduction Research: Non-Starr Progress Reports, 1943-1944
 - 7.1 Progress Reports 1-5 on Precipitation Static Reduction (State College of Washington), 1943
 - 7.2 "A Final Report on Precipitation Static Reduction Research" (Washington State College), 1944
- 2.008 Research Materials re: Precipitation-Static Reduction, 1937-1951 undated
 - 8.1 Canadian Radium & Uranium Corporation - data, undated
 - 8.2 Photos and Negatives of Test Facility and Results, undated
 - 8.3 United Airlines - correspondence, data, and calculations, 1937-1938
 - 8.4 Radio Interference Frequency Spectra - data and calculations, 1939
 - 8.5 Precipitation Static Research (Civil Aeronautics Administration), 1940
 - 8.6 Radium Discharger Report - draft w/graph, 1942
 - 8.7 Aircraft Precipitation Static Investigations (TWA) - lab results, 1942-1943
 - 8.8 Precipitation-Static - ARL Progress Report, 1943
 - 8.9 Precipitation Static Bulletin Correspondence, 1938-1945
 - 8.10 Advisory Reports, 1940-1951
- 2.009 Research Materials re: Precipitation-Static Reduction, 1931, 1941-1943 undated
 - 9.1 Aircraft Precipitation Static Proposed Resistive Discharger for Aircraft + Experimental Positive-Point-Discharger Frequency Spectrum, undated
 - 9.2 Point discharges and Precipitation Static Illustrations, undated
 - 9.3 Static Discharge Study - drafts, undated
 - 9.4 Figures for Discharge Current and Flame Behavior,
 - 9.5 "The Effect of an Electric Field on Flames and their Propagation" (Lewis) + "The Effect of an Electric Field on the Propagation of Flame" (Guenault, Wheeler), 1931
 - 9.6 Flame Discharger - correspondence, test results, 1941-1943
 - 9.7 Discharger Data, 1941-1943
 - 9.8 Aircraft Precipitation Static Discharge Devices - graphs, figures, paper, 1943
 - 9.9 Precipitation Static Research - propeller tip discharge testing, 1942-1943
- 2.010 Research Materials re: Precipitation-Static Reduction, 1938-1944 undated
 - 10.1 Rough Draft Materials - handwritten and typed appendices (Starr), undated
 - 10.2 Technical Data - calculations and notes, 1938-1944
- 2.011 Research Materials re: Precipitation-Static Reduction, 1942-1944 undated
 - 11.1 Airplane discharge characteristics - original drawings, photostat negatives, undated
 - 11.2 Vacuum Chamber - drawings & calculations (Huggins), 1942
 - 11.3 Blower-Exhauster - correspondence re: building an air tunnel test chamber, 1942-1943

- 11.4 Experiment materials: cathode ray oscillograms and negatives - Point Discharge Studies, Performance Characteristics of Discharge Devices, 1944 undated

Box

3. Nuclear Power, 1940-1988 (31 boxes)

A member of the Manhattan Project and later a consultant to the Atomic Energy Commission, Eugene Starr was closely acquainted with the development of nuclear power from its inception. The materials in Series 3 reflect this life-long interest, and specifically detail his contacts with nuclear power interests in the Pacific Northwest. Starr's participation as a civilian observer at the first Operation Crossroads nuclear test on Bikini Atoll is also documented in this series.

- 3.001 Materials re: Washington Public Power Supply, New Production Reactor, 1962-1964, 1974, 1983
- 1.1 Planning Conferences - notes, 1962-1964
 - 1.2 BPA Committee, Nov 1962 - Jan 1963 June 1974
 - 1.3 NW Power Planning Council (NWPPC) - "WPPSS 1, 2, & 3 - Decisions Under Uncertainty" - draft, 1983
- 3.002 Materials re: Washington Public Power Supply, New Production Reactor, 1962-1964
- 2.1 Transmission Planning, Nov 1962 - Mar 1963
 - 2.2 Transmission Planning, Apr 1963 - Feb 1964
- 3.003 Materials re: Washington Public Power Supply, New Production Reactor, 1962-1964, 1970, 1975
- 3.1 "Preliminary Feasibility Analysis" (RW Beck & Associates), 1962
 - 3.2 Site Survey Materials, 1962-1963
 - 3.3 "Proceedings Commercial Fabrication of Plutonium Fuels" (Hanford Laboratories), 1964
 - 3.4 BPA "Special Hanford NPR Study", 1970
 - 3.5 "Status Report - Conceptual Fuel Cycle Studies for the Hanford Nuclear Energy Center" (Battelle NW) - 4 copies , 1975
- 3.004 Materials re: Washington Public Power Supply, New Production Reactor, 1960-1963
- 4.1 Cooling System - flow diagrams, 1960 1962
 - 4.2 Control Systems, Apr 1961 - Dec 1962
 - 4.3 Sixth Loop, 1962-1963
 - 4.4 Steam Pressure and Quality - calculations, 1962-1963
- 3.005 Materials re: Washington Public Power Supply, New Production Reactor, 1963-1982
- 5.1 Washington Public Power Supply System (WPPSS) Hanford Project, 1963
 - 5.2 Progress Reports, 1963-1964
 - 5.3 WPPSS Hanford Plant - Operating data, reports, 1963-1965
 - 5.4 WPPSS Hanford Plant - Operating data, reports, 1965-1982
- 3.006 Materials re: Washington Public Power Supply, New Production Reactor, 1961-1963, 1966, 1973-1984
- 6.1 "Power Conversion Studies - Hanford New Production Reactor", 1961
 - 6.2 Ground-breaking for the Hanford Steam Plant - program, 1963
 - 6.3 Willis T. Batcheller, consulting engineer - NPR Design Deficiencies, 1962 1963 1966
 - 6.4 Reactor Termination [Jan 1963 - Mar 1971] + Oregonian Article, 1980
 - 6.5 Governor's Panel Report on Impact of WPPSS 4 & 5 + Final Report to Washington State Legislature + Report to Regional Council, 1981-1982
 - 6.6 WPPSS 3 & 5 - Frequency Decay Study, 1982
 - 6.7 Analysis of Resource Alternatives: WNP-3, 1983
 - 6.8 Daily Report Journal from Hanford Generating Plant, Aug 1973 - Apr 1984
- 3.007 Materials re: Washington Public Power Supply, New Production Reactor, 1960-1965
- 7.1 Contracts, 1960-1962
 - 7.2 AEC - correspondence, 1962-1963
 - 7.3 Burns & Roe - correspondence, 1962-1963
 - 7.4 Tennessee Valley Authority - correspondence, 1962-1963
 - 7.5 Turbine Generator - specifications, bids and analysis, 1962-1963

- 7.6 Schedules for Construction, Bids and Contracts, 1962-1965
- 3.008 Materials re: Washington Public Power Supply, New Production Reactor, 1958, 1961-1965, 1969, 1976, 1979
 - 8.1 Bond Issuance - official statement, 1963
 - 8.2 5-6 loop Conversion - cost estimates, incremental analysis, 1963-1964
 - 8.3 Construction Budget, May 1963 - Jul 1965
 - 8.4 Auxiliary Steam Supply Systems - cost comparisons (Warchol), 1969
 - 8.5 Fuel - research, development and costs, 1958 1961-1964 1969
 - 8.6 WPPSS Cost and Budget Information, 1976 1979
- 3.009 Materials re: Washington Public Power Supply, New Production Reactor, 1961-1965, 1969, 1976, 1979
 - 9.1 Turbine-Generators - performance and cost estimates, 1963
 - 9.2 Cost estimates, 1961-1965
 - 9.3 Operation - costs, output and outages, 1962-1964 1967
 - 9.4 Position Paper - budget, contract information, 1981
 - 9.5 Turbine Generator - data and reports, 1976-1988
- 3.010 Materials re: Washington Public Power Supply, New Production Reactor, 1960-1967
 - 10.1 NPR - 16 viewgraphs for overhead projector,
 - 10.2 NPR - engineering aspects, 1960-1962
 - 10.3 NPR - lecture notes, photos & materials, 1961-1964
 - 10.4 NPR - Conversion, Feasibility Studies, 1962
 - 10.5 NPR - Conversion, Feasibility Studies, 1963
 - 10.6 NPR Hanford Plant - plant factors, 1963-1967
- 3.011 Materials re: Washington Public Power Supply, New Production Reactor, 1960-1973
 - 11.1 NPR - memos, 1960-1963
 - 11.2 NPR - financing, 1962-1963
 - 11.3 NPR - WPPSS - contract w/General Electric (GE), 1963
 - 11.4 WPPSS Nuclear Project No. 2 - Agreement, 1970
 - 11.5 Hanford Contracts, 1962-1973
- 3.012 Materials re: Washington Public Power Supply, New Production Reactor, 1963-1966, 1970, 1982
 - 12.1 Hanford Electric Generating Project, 1963
 - 12.2 NPR - personnel - employee reviews [1964-1968], position descriptions, organization, 1963-1966
 - 12.3 WPPSS Hanford Nuclear Steam Plant Inspection - Units #1 & #2, July 1970
 - 12.4 "Draft Final Report - Independent Review of WNP-4 and 5" (Washington Energy Resource Center, Washington State University, University of Washington), 1982
- 3.013 Materials re: Atomic Energy Commission Ad Hoc Advisory Committee, 1956, 1958, 1960
 - 13.1 Meeting Minutes, Oct 3, 1958
 - 13.2 Liquid Metal Fuel Reactor studies (5 items), 1958
 - 13.3 "Program 4000 - Reactor Development - Status & Progress Report" (Oak Ridge National Laboratories), Sept 1958
 - 13.4 "Molten Salt Reactor Program" (Oak Ridge National Laboratories), 1958
 - 13.5 "The ORNL Gas-Cooled Reactor" (Oak Ridge National Laboratories) + "The ORNL Gas-Cooled Reactor - Advanced Concepts" (Oak Ridge National Laboratories), 1958
 - 13.6 Operation Know-How (General Electric) + Operation Sunrise (General Electric),
 - 13.7 3 Pages from Nuclear Power re: British Power Stations and Reactors, Sept 1958
 - 13.8 Committee materials given to EC Starr - including "Plutonium Recycling in Thermal Reactors", 1958
 - 13.9 Committee materials given to EC Starr - including "Experimental Power and Test Reactors" (AEC) [1956] and "Civilian Power Reactor Program - Plans for Development", 1960
 - 13.10 Committee materials given to EC Starr - including correspondence, 1958
 - 13.11 Committee materials given to EC Starr - including "Eight Reactor Types - A Thermodynamic Comparison (Burns and Roe, Inc.) [1958] and "Fact Sheets on Nuclear Energy Power Projects", 1958
- 3.014 Materials re: Atomic Energy Commission Ad Hoc Advisory Committee, 1956-1960
 - 14.1 "Statistical Charts & Data for Ad Hoc Advisory Committee on Reactor Policies & Programs", Oct - Nov 1958
 - 14.2 AEC Ad Hoc Committee on Reactor Policies and Programs - correspondence, reports, materials, 1956-1959

- 14.3 AEC Ad-Hoc Advisory Committee on Reactor Policies and Programs - correspondence on final draft, minutes, testimonies, 1958-1960
- 3.015 Materials re: Atomic Energy Commission Ad Hoc Advisory Committee, 1958-1959
- 15.1 AEC Ad-Hoc Advisory Committee on Reactor Policies and Programs - correspondence, minutes, reports, 1958-1959
- 15.2 AEC Civilian Power Program - Part IV Program Recommendations for Civilian Power Reactors, 1959
- 15.3 "Civilian Nuclear Power - Report by Ad Hoc Advisory Committee on Reactor Policies and Programs United States Atomic Energy Commission", 1959
- 3.016 Materials re: Atomic Energy Commission Ad Hoc Advisory Committee, 1953-1954, 1958, 1960, 1963
- 16.1 "Report of the Sodium Graphite Technical Task Force", 1958
- 16.2 Atomic Energy Commission - Nuclear Power, 1953-1954
- 16.3 Atomic Energy Commission - Puget Sound, 1954
- 16.4 Atomic Energy Commission Civilian Power Reactor Program - Parts II, III, IV, 1960
- 16.5 Atomic Energy Commission Releases, 1963
- 3.017 Materials re: Atomic Energy Commission Ad Hoc Advisory Committee, 1955-1964, 1966
- 17.1 "Radioactive Fallout - A Two-Year Summary Report" (Dunham), 1959
- 17.2 Civilian Nuclear Power - Report by Ad Hoc Advisory Committee on Reactor Policies and Programs, 1959
- 17.3 "Atomic Energy Commission Civilian Power Program - Part I Current Status of Reactor Concepts", 1959
- 17.4 "Atomic Energy Commission Civilian Power Program - Part II Economic Potential and Development Program", 1959
- 17.5 Atomic Energy Commission Publications, 1955-1963
- 17.6 Atomic Energy Commission Remarks, 1955 1964 1966
- 3.018 Papers, Reports and Publications re: Nuclear Power, 1953-1964
- 18.1 Papers, reports and publications, 1953-1957
- 18.2 Papers, reports and publications, 1958-1959
- 18.3 Papers, reports and publications, 1960-1964
- 3.019 Papers, Reports and Publications re: Nuclear Power, 1966, 1968-1976
- 19.1 Papers, reports and publications, 1966
- 19.2 Papers, reports and publications, 1968-1969
- 19.3 Papers, reports and publications, 1970-1976
- 3.020 Papers, Reports and Publications re: Nuclear Power, 1977-1986
- 20.1 Papers, reports and publications, 1977-1979
- 20.2 Papers, reports and publications, 1980-1982
- 20.3 Papers, reports and publications, 1983-1986
- 3.021 Presentations and Photos re: Nuclear Power, 1949-1968
- 21.1 "Nuclear Power - Its Future in the Northwest" (EC Starr) - materials and drafts for presentation, 1958
- 21.2 Nuclear Plant Photos - Shippingport & others, 1958
- 21.3 Nuclear Power Presentations - materials, drafts, note cards, photos, 1949-1959
- 21.4 Rugeley Plant Cooling Towers - photos, 1968
- 3.022 Materials re: Three Mile Island and the Atomic Bomb, 1945-1979
- 22.1 Operation Crossroads - invitation, correspondence, presentation notices including first impressions of A-Bomb test, 1945-1948
- 22.2 Special Briefing on Harrisburg Events (Three Mile Island), 1979
- 22.3 Three Mile Island Incident, 1979
- 3.023 Materials re: Particle Accelerators and Nuclear Fusion Research, 1961-1986
- 23.1 "Catalogue of High Energy Accelerators" (Brookhaven National Laboratory), 1961
- 23.2 High Energy Physics - Accelerators - several publications, 1961-1965
- 23.3 Accelerator Site Selection Committee, 1965
- 23.4 Engineering Test Reactor for Fusion Research - discussion, reports, 1985-1986
- 23.5 Materials on Fusion Energy Research as it relates to an Engineering Test Reactor, 1986
- 3.024 Materials re: Costs of Nuclear Power Generation, 1952-1982
- 24.1 Power Generation Cost Comparisons -nuclear, coal, hydro, 1952-1959
- 24.2 "Costs of Nuclear Power" (AEC), 1959
- 24.3 Nuclear Power Costs - Passamaquoddy, Oyster Creek, TVA, etc., 1963-1968

- 24.4 "The Economics of Nuclear Power" (Brandfon) + "Economic and Technical Experience of Nuclear Power Production in the U.S." (Behnke), 1982
- 3.025 Materials re: Non-U.S. Nuclear Power Systems, 1959-1960, 1969-1970, 1984-1985
- 25.1 "Scientific Research in Great Britain - With Emphasis on Basic Research and Research in Atomic Energy", 1959
- 25.2 "Relative Water and Power Resource Development in the USSR and the USA", 1960
- 25.3 British Nuclear Forum's Trade Mission, 1970
- 25.4 Nuclear Power in the United Kingdom, Dounreay Fast Reactor - reports, 1969-1970
- 25.5 "Disparities in Nuclear Plant Performance in the United States and the Federal Republic of Germany" (Hansen, Winje), 1984
- 25.6 "Comparative Evaluation of Nuclear Power in Japan and the United States - A Report to the Japanese-United States Friendship Commission" (Lowinger, Hinman), 1985
- 3.026 Materials re: Nuclear Power Plant Siting, 1967-1968
- 26.1 "Nuclear Power Plant Siting in the Pacific Northwest" for BPA - Summary Report (Battelle-Northwest), 1967
- 26.2 "Nuclear Power Plant Siting in the Pacific Northwest" for BPA (Battelle-Northwest), 1967
- 26.3 Federal Power Commission S.2564/S.3330 - Nuclear plant siting/sharing - papers and memos, 1968
- 3.027 Assorted Materials re: Nuclear Power, 1940, 1965-1968
- 27.1 "Feed Water Heating" (Reynolds), 1940
- 27.2 Waste Heat - cooling towers, river regulation, steam vents, 1965-1968
- 3.028 Assorted Materials re: Nuclear Power, 1954-1964
- 28.1 "Development of Steam Generated Electric Power Resources - Preliminary Report" (Washington State Power Commission), 1954
- 28.2 "US Reactor Operating History 1943-1956" (Moteff), 1956
- 28.3 Second UN Conference on the Peaceful Uses of Atomic Energy - 9 papers, 1958
- 28.4 AIEE/IEEE Nuclear Science Group - correspondence, papers, meetings, 1955-1964
- 3.029 Assorted Materials re: Nuclear Power, 1962-1963, 1966-1969
- 29.1 Minnesota Power Study - data & reports, 1962-1963
- 29.2 IEEE Summer General Meeting and Nuclear Radiation Effects Conference - Toronto, 1963
- 29.3 Use of Plutonium in Water Reactors - contract documents (General Electric), February 1966 - February 1967
- 29.4 Use of Plutonium in Water Reactors - monthly reports June '66 - December '66 (General Electric), 1966-1967
- 29.5 Use of Plutonium in Water Reactors - monthly reports January '67 - July '67 (General Electric), 1966-1967
- 29.6 Use of Plutonium in Water Reactors - progress reports (Westinghouse), Aug 1966 - Dec 1967
- 29.7 "Quality Control" (Vickers Limited), 1968
- 29.8 Kiket Island Nuclear Plant Site - Preliminary site data & speech, 1969
- 3.030 Assorted Materials re: Nuclear Power, 1970-1975, 1982-1983
- 30.1 PGE Trojan Interim Engineering Review Committee, 1972
- 30.2 American Nuclear Society - correspondence, minutes, 1970-1975
- 30.3 "Study of a Conceptual Nuclear Energy Center at Green River, Utah - Final Summary Report" (Utah Energy Office), 1982
- 30.4 "National Electric Power Grid Assessment Program - Phase I Final Report (Boeing), 1982-1983
- 30.5 Atomic Industrial Forum - BPA membership and dues correspondence, 1981-1984
- 30.6 1563 MW(e) HTGR Plant Concepts (Edison, TVA, GE, Bechtel, etc.) ,
- 3.031 Classified Nuclear Power Material Receipts & Inventories, 1953-1976
- 31.1 Classified Nuclear Power Material Receipts & Inventories, 1953-1962
- 31.2 Classified Nuclear Power Material Receipts & Inventories, 1963-1976

Box**4. Power Generation, 1948-1988 (15 boxes)**

Through his long association with the Bonneville Power Administration, Eugene Starr encountered many opportunities for research and discussion on new forms of electric power generation. This series documents his interest in a variety of power sources, including alternative power generation through wind, hydroelectric and solar means.

- 4.001 Materials re: Energy Conservation, 1973-1978
 - 1.1 OEPBS Series on Northwest Energy Problems, 1973
 - 1.2 Northwest Regional Conference on the Energy Crisis - Lewis and Clark College - w/presentation by Starr + IEEE Cassette: "Energy Crisis Engineering Solutions", 1974
 - 1.3 "The National Energy Plan - Summary of Public Participation" (Executive Office of the President/Energy Policy and Planning), 1977
 - 1.4 "The National Energy Plan" (Executive Office of the President/Energy Policy and Planning), 1977
 - 1.5 Energy Conservation - projects and studies, 1976-1977
 - 1.6 Energy - papers, articles, etc., 1974-1978
- 4.002 Materials re: Energy Conservation, 1979-1983
 - 2.1 "Energy for the '80s" Conferences, 1980-1981
 - 2.2 Energy - papers, articles, etc., 1979-1982
 - 2.3 "Northwest Conservation and Electric Power Plan - Vol. I" (Northwest Power Planning Council), 1983
 - 2.4 "Regional Conservation and Electric Power Plan" (Northwest Power Planning Council) - draft + responses to draft energy plan, 1983
- 4.003 Materials re: Alternative Energy Sources, 1960-1979 undated
 - 3.1 Energy Storage, 1971-1974
 - 3.2 Energy Storage, 1975-1976
 - 3.3 Alternative Energy - papers and reports, 1960-1979
 - 3.4 Wave Energy and Utilization of Municipal Refuse - 1 item each, undated
- 4.004 Materials re: Alternative Energy Sources, 1974-1984
 - 4.1 BPA Raft River Geothermal Plant Project, 1978-1981
 - 4.2 Transportable Power Generation Equipment, 1979
 - 4.3 French Publications on Renewable Energy Options (untranslated), 1980-1982
 - 4.4 Fuel Cell Power Plants, 1981
 - 4.5 Waste Heat Utilization, 1974-1984
- 4.005 Materials re: Alternative Energy Sources, 1980-1983
 - 5.1 "Report on the Evaluation of Eleven Geothermal Proposals" (Kaiser Engineers Power Corporation), 1982
 - 5.2 Alternative Energy - papers and reports, 1980-1983
 - 5.3 Kopp's Concept for Using Deep, Condensate-Rich Gas Traps for Power, 1983
- 4.006 Materials re: Solar Voltaic Energy, 1956, 1974-1987
 - 6.1 Alfred H. Canada correspondence on 'Strategic' Solarvoltaic Generation - 4 copies of letter + 10 enclosures, 1978-1984
 - 6.2 Solar Voltaic Power Generation, 1956 1974-1987
- 4.007 Materials re: Wind Energy, 1975-1987
 - 7.1 "Small Wind Energy Conversion Systems" (University of Washington), 1983
 - 7.2 Wind Power - papers and publications, 1975-1987
- 4.008 Materials re: Wind Energy, 1978-1988
 - 8.1 "MOD-2 Wind Turbine Farm Stability Study for NASA" (Hinrichsen & Nolan), 1980
 - 8.2 BPA MOD-2 Wind Power Research Test Program, 1978-1988
- 4.009 Materials re: Wind Energy, 1983
 - 9.1 BPA MOD-2 Wind Power Research Test Program Review, June 30, 1983
- 4.010 Materials re: Hydroelectricity, 1941, 1951, 1957, 1962-1965, 1976
 - 10.1 Boulder Dam Generator Data, 1941
 - 10.2 "Hydroelectric Power Resources of the United States - Developed and Undeveloped" (Federal Power Commission), 1957
 - 10.3 Maps of Hydroelectric Projects and Transmission Systems, 1962-1965

- 10.4 BPA - Hanford Project Critical Hydro Conditions, 1965
- 10.5 Ontario Hydro - report on need for R & D and publication on Research Laboratory, 1967
- 10.6 Teton Topographical Map, 1951
- 10.7 Teton Dam failure - article on need for new plant in Ellensburg, 1976
- 4.011 Materials re: Hydroelectricity, 1957-1981
 - 11.1 Hydroelectric Power Generation, 1957-1980
 - 11.2 Kaplan Turbine Accident Reports - reverse water hammer accident, 1980
 - 11.3 "Observations and Comments on the Turbine Failure at Yankee Atomic Electric Company, Rowe, Massachusetts" (Goldberg, Streit), 1981
 - 11.4 "Simplified Methodology for Economic Screening of Potential Low-Head Small-Capacity Hydroelectric Sites" (EPRI), 1981
 - 11.5 "Tyee Lake Hydroelectric Project - Environmental Impact Statement" (Federal Energy Regulatory Commission), 1981
 - 11.6 "B.C. Hydro Research & Development 1984/85 Work Program" ,
- 4.012 Materials re: Hydroelectricity, 1977, 1979
 - 12.1 "1st Progress Report of Feasibility Study of Hydroelectric Generation at Pelton Reregulating Dam" (Dibble), 1977
 - 12.2 "Pelton Reregulating Dam Hydroelectric Project - Feasibility Report" (The Confederated Tribes of the Warm Springs Reservation of Oregon), 1979
- 4.013 Materials re: Steam Plants, 1948-1985
 - 13.1 Steam Plants - loading studies, typical economy, heat balance, 1949-1951
 - 13.2 "Harbor Steam Plant - Power System" (Department of Water and Power, City of Los Angeles), 1950
 - 13.3 Centralia Steam Plant Development, 1969
 - 13.4 "The Role of the Bonneville Power Administration in the Pacific Northwest Power Supply System Including its Participation in the Hydro-Thermal Power Program - EIS Summary Report" (BPA), 1977
 - 13.5 Daily Reports and Notes on Power Plants, Oct 1978 - Jul 1979
 - 13.6 Steam Plants, 1948-1985
- 4.014 Materials re: Coal Plants, 1969-1977
 - 14.1 Coal Transportation Costs, 1969-1977
 - 14.2 Reports on Smokestacks at Coal Fired Plants, 1971-1974
 - 14.3 Colstrip Power Transmission Project - maps, photos, and reports, 1972-1977
- 4.015 Materials re: Coal Plants, 1958-1980, 1983
 - 15.1 Coal Power - articles and reports, 1958-1980
 - 15.2 "Energy Legislation - Combined Cycle Power Generation Option", 1977
 - 15.3 "Slurry Pipelines: Economic and Political Issues" (Banks), 1977
 - 15.4 Coal-Slurry Project - Salem Harbor, 1979
 - 15.5 "Colstrip Interim Operating Studies" (Kreipe), 1983

Box

5. Organizations, 1932-1988 (19 boxes)

Starr's close association with a handful of professional organizations are documented in this series. Of particular interest are the twelve boxes of materials related to Starr's interactions with the Institute of Electrical and Electronics Engineers, including his two-year stint as a member of the group's Board of Directors.

- 5.001 Institute of Electrical and Electronics Engineers (IEEE) - Board of Directors, 1963
 - 1.1 IEEE Board of Directors Meeting - New York, January 1963
 - 1.2 IEEE Board of Directors Meeting - during Southwest IRE Conference (SWIRECO) - Dallas, April 1963
 - 1.3 IEEE Board of Directors Meeting - during IEEE Summer General Meeting - Ontario, June 1963
 - 1.4 IEEE Board of Directors Meeting - during NEC - Chicago, October 1963
- 5.002 Institute of Electrical and Electronics Engineers (IEEE) - Board of Directors, 1964-1965
 - 2.1 IEEE Board of Directors Meeting - during Annual Assembly - New York, January 1964
 - 2.2 IEEE Board of Directors Meeting - minutes missing - New York, April 1964

- 2.3 IEEE Board of Directors Meeting - during WESCON and IEEE Summer General Meeting - L.A., August 1964
- 2.4 IEEE Board of Directors Meeting - during NEC - Chicago, October 1964
- 2.5 IEEE Board of Directors Meeting - during Annual Assembly - minutes missing - New York, January 1965
- 5.003 Institute of Electrical and Electronics Engineers (IEEE) - Awards, 1961-1984
 - 3.1 "IEEE Awards Board Manual", 1964
 - 3.2 IEEE Field Awards Committee - correspondence and materials, 1963-1969
 - 3.3 IEEE Field Awards Committee - correspondence and materials, 1970-1975
 - 3.4 IEEE Field Awards Committee - nominations, 1961-1983
 - 3.5 IEEE Lamme Medal Committee, 1981-1984
 - 3.6 IEEE Field Awards Candidate Search Committee, 1983-1984
- 5.004 Institute of Electrical and Electronics Engineers (IEEE) - Awards, 1962-1966, 1969, 1971-1974, 1976, 1982-1984, 1988
 - 4.1 EC Starr Endorsements of Nominations for Harbshaw Awards: Gunnar Jancke 1971, Cahill and Archambault 1972, Edward Kimbark 1976, and J.J. Dougherty 1983, 1971-1972, 1976, 1983
 - 4.2 EC Starr Endorsements of Nominations: L. M. Robertson for Founders Medal 1976, Harold Peterson for Nikola Tesla Award 1975 and Education Medal 1976, 1975-1976
 - 4.3 "IEEE Awards - An Invitation to Nominate", 1965 1969 1973 1976 1983
 - 4.4 IEEE Awards - brochures, 1962-1966
 - 4.5 Nomination of Everett Harrington for IEEE William Martin Harbshaw Award, 1973-1974
 - 4.6 Power Engineering Educator Award Nomination for Eric T. B. Gross, 1976
 - 4.7 Response of P. L. Bellaschi to receipt of Willam Harbshaw Award, 1982
 - 4.8 IEEE Centennial Medal - correspondence and materials, 1982-1983
 - 4.9 Nomination of I. Birgen Johnson for IEEE Lamme Medal (EC Starr nominated), 1984
 - 4.10 IEEE Fellow Nomination Packet - blank + IEEE rejection of Marv Klinger's nomination, 1988
 - 4.11 Nomination of L. M. Robertson for IEEE William Martin Harbshaw Award, 1963
 - 4.12 Nomination of Ralph S. Gens for IEEE William Martin Harbshaw Award, 1982
- 5.005 Institute of Electrical and Electronics Engineers (IEEE) - Senior and Fellow Grade References, 1964-1971, 1973-1978, 1980-1984
 - 5.1 IEEE Senior and Fellow Grade References, 1964-1971
 - 5.2 IEEE Senior and Fellow Grade References, 1973-1976
 - 5.3 IEEE Senior and Fellow Grade References, 1977-1978
 - 5.4 IEEE Senior and Fellow Grade References, 1980-1984
- 5.006 Institute of Electrical and Electronics Engineers (IEEE) - Paper Reviews and Discussions, 1937-1949, 1970-1986
 - 6.1 IEEE Paper Reviews/Discussions, 1937-1949
 - 6.2 IEEE Paper Reviews/Discussions, 1970-1975
 - 6.3 IEEE Paper Reviews/Discussions, 1976-1977
 - 6.4 IEEE Paper Reviews/Discussions, 1978-1986
- 5.007 Institute of Electrical and Electronics Engineers (IEEE) - Correspondence and Meeting Minutes, 1932, 1962-1964, 1976, 1985
 - 7.1 *The Journal of the Institution of Electrical Engineers*, June 1932
 - 7.2 Merge of the Institute of Radio Engineers (IRE) and the American Institute of Electrical Engineers (AIEE), 1962
 - 7.3 IEEE Board of Directors Policy Manual including Engineers Council for Professional Development Report, 1962
 - 7.4 IEEE Report of the Secretary, 1963
 - 7.5 IEEE Section Manual, 1963
 - 7.6 "IEEE Student Branch Manual", 1964
 - 7.7 "Manual for IEEE Counselors", 1964
 - 7.8 "The US Energy Equation and the Role of Electricity - a position statement" (IEEE), 1976
 - 7.9 "Standard Procedure for Measurement of Power Frequency Electric and Magnetic Fields from AC Power Lines" (IEEE), 1985
- 5.008 Institute of Electrical and Electronics Engineers (IEEE) - Correspondence and Meeting Minutes, 1962-1986
 - 8.1 IEEE Publications Board, 1966-1967
 - 8.2 IEEE Materials - brochures, notes, newsletters, 1963-1985

- 8.3 IEEE Correspondence, 1962-1986
- 5.009 Institute of Electrical and Electronics Engineers (IEEE) - Correspondence and Meeting Minutes, 1963-1964, 1966, 1971, 1975-1976
 - 9.1 AIEE Winter General Meeting - committee info and correspondence - New York, 1963
 - 9.2 IEEE Pacific Annual Meeting - Spokane, 1963
 - 9.3 IEEE International Convention - New York, 1964
 - 9.4 Western Electronics Show and Convention (WESCON) - IEEE Meeting - session C information - L.A., 1964
 - 9.5 IEEE Cultural and Scientific Exchange, Apr - Sep 1966
 - 9.6 IEEE Summer Power Meeting & International Symposium on High Power Testing - chair materials and biographical sketches of speakers, 1971
 - 9.7 Joint Power Generation Conference - Winter Meeting - chair materials: biographical sketches of authors, introductions - Portland, OR, 1975
 - 9.8 IEEE Power Generation Committee "Energy Development - D" Technical Session Summer Power Meeting, 1976
 - 9.9 IEEE Winter Power Meeting, 1976
- 5.010 Institute of Electrical and Electronics Engineers (IEEE) - Correspondence and Meeting Minutes, 1978, 1982-1984
 - 10.1 IEEE Winter Power Meeting - notes and discussions, 1978
 - 10.2 IEEE Summer Meeting, 1982
 - 10.3 IEEE Winter Meeting - New York, 1983
 - 10.4 IEEE Centennial Program 1984 - preparation materials, 1983
 - 10.5 IEEE Summer Meeting, LA - papers, brochures, materials, 1983
 - 10.6 IEEE Summer Power Meeting - minutes, reports, brochures, 1984
 - 10.7 IEEE Winter Power Meeting - minutes, reports, and brochures, 1984
- 5.011 Institute of Electrical and Electronics Engineers (IEEE) - Correspondence and Meeting Minutes, 1943-1944, 1950, 1976-1986
 - 11.1 AIEE Subcommittee on Guide for Impulse Testing - correspondence, 1943-1944
 - 11.2 West Coast Sub Committee on Electronic Power Converters - memo of meeting, committee report, bibliography on power converters, 1950
 - 11.3 Insulation Subcommittee of Rotating Machinery Committee - minutes, 1977
 - 11.4 "IEEE Recommended Practice for Thermal Evaluation of Insulation Systems for A C Electrical Machinery Employing Form-Wound Preinsulated Stator Coils - Machines rated 6900 volts and below" (IEEE) drafts, 1979 1983
 - 11.5 IEEE Power Generation Committee - Minutes of Meetings, 1976-1984
 - 11.6 Energy Development Subcommittee, DC Transmission Task Force, Standards Subcommittee, 1979 1982-1985
 - 11.7 IEEE Transmission and Distribution Capacitor Subcommittee - correspondence, drafts, meeting minutes, 1980 1982 1986
- 5.012 Institute of Electrical and Electronics Engineers (IEEE) - Correspondence and Meeting Minutes, 1949-1953, 1964, 1969, 1976, 1981, 1985-1986
 - 12.1 AIEE Transmission and Distribution - correspondence, 1949-1953
 - 12.2 IEEE Transmission and Distribution Committee Meeting - New York, 1964 1969
 - 12.3 IEEE Power Meeting - minutes and standards information for Transmission and Distribution Committee, 1976
 - 12.4 "IEEE Transmission and Distribution Committee - Report of Meeting", 1981 1985 1986
 - 12.5 IEEE Transmission & Distribution Committee and Subcommittee binders,
- 5.013 International Council on Large Electric Systems (CIGRE) - Correspondence and Meeting Minutes, 1958-1962
 - 13.1 CIGRE - general - correspondence, minutes, proceedings, 1958-1961
 - 13.2 CIGRE Study Committee #10 - correspondence, 1959-1961
 - 13.3 US Technical Subcommittee - correspondence, 1960-1961
 - 13.4 CIGRE Study Committee #10 - meeting correspondence Paris, 1962
 - 13.5 HVDC Seminar in Sweden - schedules, correspondence, 1962
- 5.014 International Council on Large Electric Systems (CIGRE) - Correspondence and Meeting Minutes, 1962-1964
 - 14.1 CIGRE - general - correspondence, minutes, proceedings, 1962-1963
 - 14.2 CIGRE Study Committee #10 - meeting correspondence, minutes London, 1963
 - 14.3 CIGRE - general - correspondence, minutes, proceedings, 1964

- 14.4 CIGRE conference Paris - correspondence, 1964
- 5.015 International Council on Large Electric Systems (CIGRE) - Correspondence and Meeting Minutes, 1965-1969
- 15.1 CIGRE - general - correspondence, minutes, proceedings, 1965-1969
- 15.2 CIGRE Study Committee #10 - meeting notes, 1966
- 15.3 CIGRE meeting notes (EC Starr), 1967
- 15.4 CIGRE Study Committee #10 - meeting correspondence Heidelberg, 1968
- 5.016 International Council on Large Electric Systems (CIGRE) - Correspondence and Meeting Minutes, 1962-1968
- 16.1 CIGRE Study Committee #10 - correspondence, 1962-1963
- 16.2 CIGRE Study Committee #10 - correspondence, 1964
- 16.3 CIGRE Study Committee #10 - correspondence, 1965-1968
- 5.017 International Council on Large Electric Systems (CIGRE) - Correspondence and Meeting Minutes, 1970-1979
- 17.1 CIGRE (L.A.) & IEEE (Portland) meetings - materials, correspondence, arrangements for delegates, 1971
- 17.2 Welcoming Statement by EC Starr at Opening Session of Cigre Study Committee No. 14, 14 July 1971
- 17.3 "Recent Performance of the HVDC Pacific Intertie (Report to CIGRE Study Committee 14)" (EC Starr), 1973
- 17.4 CIGRE Study Committee #14 - correspondence Tokyo, 1973
- 17.5 CIGRE Study Committee #14 - correspondence Johannesburg, 1975
- 17.6 CIGRE - general - correspondence, minutes, proceedings, 1970-1974
- 17.7 CIGRE - general - correspondence, minutes, proceedings, 1975-1979
- 5.018 International Council on Large Electric Systems (CIGRE) - Correspondence and Meeting Minutes, 1980-1985 undated
- 18.1 "CIGRE Executive Report Fall - 1980" (Ransom & Casazza, Inc.),
- 18.2 Electra, Dec 1982
- 18.3 CIGRE - general - correspondence, minutes, proceedings, 1980-1982
- 18.4 CIGRE - general - correspondence, minutes, proceedings, 1983-1985
- 18.5 CIGRE - general - correspondence, minutes, proceedings, undated
- 5.019 National Academy of Engineering (NAE) and Professional Engineers of Oregon (NSPE/PEO), 1959-1987
- 19.1 Nomination of Dr. Edward W. Kimbark for membership to the National Academy of Engineering, 1978
- 19.2 "National Academy of Engineering - Nomination Forms 1981",
- 19.3 National Academy of Engineering - Peer Committee and Rosters, 1982
- 19.4 "Genetic Engineering and the Engineer" (NAE), 1982
- 19.5 "National Academy of Engineering Articles of Organization and Bylaws", 1985
- 19.6 "National Academy of Engineering - Nomination for Membership" - nomination packets 1978, 1983, 1984, 1986,
- 19.7 National Academy of Engineering - memorial tribute to Dr. Edward W. Kimbark (EC Starr) + background materials, 1986
- 19.8 National Academy of Engineering - correspondence and materials, 1977-1987
- 19.9 "Policies Professional and Administrative including Constitution and Bylaws" (NSPE), 1959
- 19.10 "1962 Directory Code of Ethics Constitution and By-Laws" (Professional Engineers of Oregon),
- 19.11 National Society of Professional Engineers - correspondence and materials, 1959-1961

Box

6. Bonneville Power Administration, 1935-1988 (33 boxes)

Series 6 is comprised of administrative records and project files collected by Starr during his more than three decades of service to the Bonneville Power Administration. One highlight is the collection of internal reports and correspondence related to the landmark Pacific Northwest/Pacific Southwest high voltage intertie.

- 6.001 Bonneville Power Administration - Alaska Power Survey, 1965-1971
- 1.1 Alaska Power Survey Study Committee 4 - Coordinated System Development and Interconnections - Regional Task Forces - correspondence, regional reports, 1965-1967
- 1.2 Alaska Power Survey - reports, newspaper clippings, 1965-1968
- 1.3 "Report to Federal Power Commission Alaska Power Survey Advisory Committee from Subcommittee No. 4 on Coordinated System Development and Interconnection" - initial draft and 2 final drafts, 1967 1968
- 1.4 "Alaska Power Survey" (Federal Power Commission) - 3 copies, 1969

- 1.5 "Ice Fog Studies in Alaska: A Survey of Past, Present and Proposed Research" (Well, Geophysical Institute), 1969
- 1.6 Alaska Power Survey Advisory Committee and Study Committee No. 4 (Coordinated System Development and Interconnection) - meeting minutes, correspondence, and reports, 1967-1971
- 6.002 Bonneville Power Administration - Alaska Power Survey, 1965-1966, 1968
- 2.1 Alaska Power Survey Advisory Committee and Study Committee No. 4 (Coordinated System Development and Interconnection) - meeting minutes, correspondence, and reports (1/2), 1965
- 2.2 Alaska Power Survey Advisory Committee and Study Committee No. 4 (Coordinated System Development and Interconnection) - meeting minutes, correspondence, and reports (2/2), 1965
- 2.3 Alaska Power Survey Advisory Committee and Study Committee No. 4 (Coordinated System Development and Interconnection) - meeting minutes, correspondence, and reports, 1966
- 2.4 "Coordinated System Development and Interconnection - a Study Prepared for the Federal Power Commission Alaska Power Survey" (Subcommittee No. 4 - Alaska Power Survey Advisory Committee) - final draft, 1968
- 6.003 Bonneville Power Administration - Alaska Power Administration, 1961, 1964-1975, 1981
- 3.1 Rampart Project - Alaska - reconnaissance, correspondence, cost estimates, 1961 1967
- 3.2 "First Annual Report 1968" (Norwood / Alaska Power Administration), 1969
- 3.3 "Water Power in Alaska - A Bibliography" (Alaska Power Administration) + "Bibliography And Historical Notes 1946-1968 Upper Yukon River Study Canada - United States" (APA), 1969
- 3.4 Alaska Power Administration - transmission studies, 1964-1971
- 3.5 Alaska Power Administration - creation of, 1967-1971
- 3.6 Alaska correspondence, 1965-1975
- 3.7 "A Regional Electric Power System for the Lower Kuskokwim Vicinity - A Preliminary Feasibility Assessment" (Robert W. Retherford Associates), 1975
- 3.8 Alaska Power Authority - Request for Proposals, 1981
- 6.004 Bonneville Power Administration - Snettisham HVDC Transmission Project, 1967-1970
- 4.1 Snettisham Project Alaska - Design Memorandum No. 9 - Transmission Facilities (U.S. Army Corps of Engineers), December 1966
- 4.2 Snettisham Project - Department of the Army - Alaska District Corps of Engineers - GE - Preliminary Information, October 1967
- 4.3 Snettisham Project - location and vicinity maps, 1966-1968
- 4.4 Snettisham Project Alaska - Supplement No. 1 to Design Memorandum No. 9 - Direct Current Transmission (U.S. Army Corps of Engineers), 1968
- 4.5 Snettisham HVDC evaluation, 1967-1970
- 6.005 Bonneville Power Administration - Snettisham HVDC Transmission Project, 1968-1969
- 5.1 "Step I Request for Technical Proposals for HVDC Transmission System at Snettisham, Alaska" - partial copy (U.S. Army Corps of Engineers), October 1968
- 5.2 "Step I Request for Technical Proposals for HVDC Transmission System at Snettisham, Alaska" (U.S. Army Corps of Engineers), December 1968
- 5.3 Snettisham - Pre-proposal Conference - minutes, February 1969
- 5.4 Anchorage HVDC First Stop Proposal Conference - minutes and correspondence, 1969
- 5.5 GE Proposal Document, October 1969
- 6.006 Bonneville Power Administration - Snettisham HVDC Transmission Project, 1967-1970, 1979-1980 undated
- 6.1 Snettisham Project correspondence, data, and studies, 1967-1969
- 6.2 "Transcript of Negotiations for HVDC Transmission System at Snettisham, Alaska between General Electric Company and Corps of Engineers at Anchorage, Alaska 19-23 January 1970", January 1970
- 6.3 "Snettisham-Ketchikan Transmission System - Preliminary Feasibility Design - Appendix I (Harstad Associates, Inc.), 1979
- 6.4 "Snettisham-Ketchikan Transmission System - Preliminary Feasibility Design (Harstad Associates, Inc.), Mar 1980
- 6.5 "Alaska Power Administration Snettisham-Ketchikan Transmission System - Preliminary Feasibility Design" (Harstad Associates, Inc.), Jan 1980
- 6.6 Westinghouse Proposal for HV-DC Converter Terminal Facilities for Snettisham Project, undated
- 6.007 Bonneville Power Administration - Snettisham HVDC Transmission Project, 1982

- 7.1 "Alaska Power Administration - Reconnaissance Design and Cost Estimate of Submarine DC Electric Power Transmission System in Southeast Alaska - Task D Report" (Teshmont Consultants, Inc.), 1982
- 7.2 U.S. Department of Energy Alaska Power Administration contract with Teshmont Consultants, Inc., 1982
- 7.3 "Alaska Power Administration - Reconnaissance Design and Cost Estimate of DC Transmission in Southeast Alaska - Task A Report", 1982
- 7.4 "Southeast Alaska Intertie DC Transmission System - Reconnaissance Design and Cost Estimate" (Teshmont Consultants, Inc.), November 1982
- 7.5 "Southeast Alaska Intertie DC Transmission System - Reconnaissance Design and Cost Estimate - Appendix I" (Teshmont Consultants, Inc.), November 1982
- 6.008 Bonneville Power Administration - Alberta Export Power Project, 1979-1981
- 8.1 Fording Coal Limited - Export Power Project - Preliminary Benefit-Cost Analysis + 1980 Program (Montreal Engineering Company, Limited), 1979-1980
- 8.2 Alberta Export Power Project - Report of the System Planning Committee, 1980
- 8.3 Alberta Export Power Project - meeting minutes and reports, November 1979 - October 1980
- 8.4 Alberta Export Power Project - meeting minutes and reports, November 1980 - June 1981
- 6.009 Bonneville Power Administration - Itaipu Sete Quedas Transmission Study, 1972-1974
- 9.1 Itaipu - Sete Quedas Transmission Study - Advisory Committee - Minutes and Working Papers, 1972-1973
- 9.2 Itaipu - Sete Quedas Transmission Study - Advisory Committee Meeting No. 3 - Working Papers, 1973
- 9.3 Itaipu - Sete Quedas Transmission Study - Advisory Committee - Minutes and Working Papers, 1974
- 6.010 Bonneville Power Administration - Itaipu Sete Quedas Transmission Study, 1966-1974
- 10.1 Itaipu - Sete Quedas Transmission Study - Transmission Lines - reports, drawings, 1971-1972
- 10.2 "Application of Series Capacitors in the 750 kV Sete Quedas Transmission System - Preliminary Investigation" (Fletcher), 1973
- 10.3 Itaipu - Sete Quedas Transmission Study - Series Capacitors and Overvoltage Studies - papers, meetings, correspondence, 1966-1974
- 6.011 Bonneville Power Administration - Itaipu Sete Quedas Transmission Study, 1942, 1962-1972
- 11.1 Itaipu - Sete Quedas Transmission Study - papers on high voltage transmission including "Report on the Pacific Intertie" (EC Starr) (2 copies), 1971
- 11.2 Itaipu - Sete Quedas Transmission Study - Papers related to long distance transmission & ac saturated reactors, 1942 1962-1972
- 6.012 Bonneville Power Administration - Itaipu Sete Quedas Transmission Study, 1970-1974
- 12.1 Itaipu - Sete Quedas Transmission Study - cost data, 1970-1972
- 12.2 Itaipu - Sete Quedas Transmission Study - AC transmission model oscillograms of reactions after faults, 1972
- 12.3 Itaipu - Sete Quedas Transmission Study - correspondence, 1971-1974
- 6.013 Bonneville Power Administration - Itaipu Sete Quedas Transmission Study, 1972 undated
- 13.1 Itaipu - Sete Quedas Transmission Study - books and brochures on FURNAS, tourist brochures, undated
- 13.2 "Itaipu - Sete Quedas Transmission Study - Preliminary Report - Volume 1", 1972
- 13.3 "Itaipu - Sete Quedas Transmission Study - Preliminary Report - Volume 2", 1972
- 13.4 Itaipu System Information - Vol. 3 Part 6, undated
- 6.014 Bonneville Power Administration - Pacific Northwest-Southwest HVDC Intertie, 1971-1972, 1975, 1977
- 14.1 "Report on the Pacific Intertie" (EC Starr) for presentation at University of Wisconsin - 5 copies + photos, diagrams, and negatives, 1971
- 14.2 "Transient Performance of Pacific Intertie" (EC Starr) - 4 drafts, photos, oscillograms and negatives - prepared for CIGRE SC #14, 1972 1975
- 14.3 "Recent Developments in HVDC Transmission" (Vithayathil) + draft of another paper on the Intertie, 1977
- 6.015 Bonneville Power Administration - Pacific Northwest-Southwest HVDC Intertie, 1971-1984
- 15.1 Notes for CIGRE Reports, 1971-1975
- 15.2 Operational Experience Reports for Celilo Terminal, 1973-1977
- 15.3 Operational Performance Reports of Pacific HVDC Intertie, 1974 1977 1979
- 15.4 Celilo - CIGRE reports, 1976-1983
- 15.5 Celilo summary of operation, 1975-1980 1983-1984
- 6.016 Bonneville Power Administration - Pacific Northwest-Southwest HVDC Intertie, 1941-1943, 1951, 1968-1972, 1975
- 16.1 Coulee-Spokane Transmission, 1941-1942
- 16.2 Grand Coulee Bus Split - tracings, 1943

- 16.3 Backup Relaying at Coulee (meeting in Schultz's Office), 1951
- 16.4 "The USA Pacific Northwest-Southwest HVDC Intertie - A Progress Report" (Osborn), 1968
- 16.5 "Celilo - Northern Terminal Pacific HV-DC Intertie", 1969
- 16.6 Electrical West - article on Pacific Intertie, 1970
- 16.7 Valve Faults at Sylmar-Celilo terminal - reports and correspondence, 1970-1971
- 16.8 DC Intertie Restoration, 1972
- 16.9 "United States Department of the Interior Bonneville Power Administration - Budget Proposals for the Supply of D.C. Converter Equipment for Celilo Terminal HVDC Pacific Northwest-Southwest Intertie - Bipole 2" (English Electric Corporation), 1975
- 6.017 Bonneville Power Administration - Pacific Northwest-Southwest HVDC Intertie, 1967, 1970-1974, 1976, 1982-1983
- 17.1 Pacific Intertie Task Force - meeting minutes, January 1972 - November 1973
- 17.2 Pacific Intertie Systems Technical Studies Task Force - reports on meetings & reports on Intertie, 1967 1970-1974
- 17.3 Celilo - research on Earth Electrode Performance, 1970 1976
- 17.4 "Test Program to Measure the DC and Low Frequency Impedance of the Ground Return Mode of the Pacific DC Intertie - Preliminary Report" (Bracken), 1982
- 17.5 Intertie Options (Mittelstadt), 1983
- 17.6 "WSCC System Disturbance Report for the 500kV Pacific Intertie Separation on Wednesday, December 22, 1982" (WSCC Formal Review Committee), 1983
- 17.7 "Pacific Intertie 1,100 MW HVDC Expansion Project - Progress Report No. 2 - Project Design and WSCC System Performance Assessment", 1985
- 6.018 Bonneville Power Administration - Pacific Northwest-Southwest HVDC Intertie, 1978-1981, 1983-1984
- 18.1 "Report on Feasibility of Upgrading the Pacific D-C Intertie to ± 500 kV" - 3 copies, 1979
- 18.2 "Corona Phenomenon, Electric Field, and Ion Measurements at the Dalles HVDC Test Line to Determine Feasibility of Upgrading the DC Intertie" (Chartier, Bracken, Stearns), 1979
- 18.3 BPA Technical Report - "The Investigation of the Loading Capability of Pacific DC Intertie - Celilo Equipment" (Branch of System Engineering), 1979
- 18.4 "Report on Feasibility of Upgrading the Pacific D-C Intertie to ± 500 kV" - 2 drafts, 1978-1979
- 18.5 "Draft Final Report - Pacific HVDC Intertie Voltage Upgrading Project - Technical Consultants Study" (Chas T. Main, Inc.), 1980
- 18.6 Celilo uprate info - diagrams and specifications, 1979-1981
- 18.7 HVDC Uprate to 3100 MW - binder w/ periodic reports, 1983-1984
- 6.019 Bonneville Power Administration - Pacific Northwest-Southwest HVDC Intertie, 1981
- 19.1 Final Report - "Pacific HVDC Intertie Voltage Upgrade Project - Technical Consultant Study" (Chas T. Main, Inc.), 1981
- 6.020 Bonneville Power Administration - Pacific Northwest-Southwest HVDC Intertie, 1965-1974
- 20.1 Pacific Intertie - reports, correspondence, etc., 1965-1969
- 20.2 Pacific Intertie - reports, correspondence, etc., 1970-1974
- 6.021 Bonneville Power Administration - Pacific Northwest-Southwest HVDC Intertie, 1975-1985 undated
- 21.1 Pacific Intertie - reports, correspondence, etc., 1975-1976
- 21.2 Pacific Intertie - reports, correspondence, etc., 1977-1979
- 21.3 Pacific Intertie - reports, correspondence, etc., 1980-1985 undated
- 6.022 Bonneville Power Administration - Correspondence and Administrative Records, 1951, 1962-1965, 1967, 1969-1974, 1977, 1980, 1982
- 22.1 Seven copies of tabulated information on steam turbines and surface condensers (Allis Chalmers), handwritten notes, 1951
- 22.2 ASEA - correspondence + maps and transparencies re: HVDC Transmission, 1962-1963
- 22.3 Battelle Study on Utilization of Fly Ash - proposal, research report, monthly progress reports, 1962-1965
- 22.4 BPA Relations with Tennessee Valley Authority (TVA), 1967
- 22.5 Technical Visits from foreign engineers, 1969-1974
- 22.6 EPRI Regional Meeting - agenda, publications list, 1977
- 22.7 BPA Mt. St. Helens - eruption and subsequent tests, 1980

- 22.8 Oak Ridge Power Systems Technology Program, 1982
- 6.023 Bonneville Power Administration - Correspondence and Administrative Records, 1953, 1957, 1964-1977, 1979 undated
 - 23.1 "Report on Special Assignment to U.S. Department of State Assistance to Malaysia and Thailand" (Eastvedt), undated
 - 23.2 "Conference on Universities and the Public Service", 1953
 - 23.3 International Power Conference, Belgrade + HVDC Inspections - arrangements, 1957
 - 23.4 Wescon meeting - correspondence, 1964
 - 23.5 "Presentation by General Electric to the Federal Power Commission Special Task Force Relative to Use of Real-Time Computers for System Security", 1966
 - 23.6 EHV Symposium + Gehrig European Trip Report, 1965-1967
 - 23.7 ASEA - Sweden trip for BPA inspection, 1968
 - 23.8 WSU Power Professorship & Thermal Power Option, 1972-1973
 - 23.9 Speeches by BPA Personnel (6 speeches), 1965-1976
 - 23.10 BPA public involvement program, 1977
 - 23.11 Northwest Power Bill, 1979
- 6.024 Bonneville Power Administration - Correspondence and Administrative Records, 1976, 1978-1979, 1982-1983
 - 24.1 "Investigation of Electrical Phenomena Associated with K. Richardson / N. Trapp BPA Claim" (West) + Judge's decision on Richardson Claim, 1976 1979
 - 24.2 Fatality of John T. Zabriskie - Investigations, 1976
 - 24.3 Mystery Air Wave Impulse in Eugene, 1978
 - 24.4 "General Electric / Bonneville Power Administration Review", 1982
 - 24.5 Trapp-Richardson Claim - materials, 1982-1983
- 6.025 Bonneville Power Administration - Correspondence and Administrative Records, 1969 undated
 - 25.1 Contract, Newspaper Clipping, Relief Program (ConEd), 1969
 - 25.2 Maps - 8B80 - 8B89, undated
 - 25.3 Maps - 9B01 - 9B12, undated
 - 25.4 Maps of Feeder Routes - Bay Ridge, Brooklyn & Queens, undated
 - 25.5 Maps of Low Tension Mains & Service Plates , undated
- 6.026 Bonneville Power Administration - Correspondence and Administrative Records, 1935, 1960, 1962-1965, 1971-1984 undated
 - 26.1 Stability Study for City of Eugene (EC Starr) - final reports, correspondence, calculations, 1935
 - 26.2 Motor Starting Tests for City of Eugene Water Board (EC Starr), 1935
 - 26.3 Eugene Water & Electric - blueprints, 1960
 - 26.4 California Water Project, 1962-1965
 - 26.6 Consulting Assignment - Sacramento Municipal Utility District, 1971
 - 26.7 Illinois Power Right-of-way condemnation, 1972
 - 26.8 EPRI - consulting position, Oct 1975 - Jan 1976
 - 26.9 Deposition - Westinghouse/Foreign Switch Gear Manufacturing, EC Starr, EH Gehrig, and Ev Harrington, 1979
 - 26.10 Consulting Possibilities, 1972-1982
 - 26.11 Report to Long Island Lighting Co. of Base Load Alternatives for 1981-1984,
 - 26.12 Drawings of Royal Water Power Board, Sweden, undated
- 6.027 Bonneville Power Administration - Correspondence and Administrative Records, 1937-1940, 1954-1955, 1967-1985
 - 27.1 Westinghouse Price Sheets, 1937-1940
 - 27.2 Columbia Basin Inter-Agency Committee, 1954-1955
 - 27.3 Committee for Future Recognition of Professional Engineers, 1969
 - 27.4 IEEE Paper - "Engineering Registration in the Future" (Tynes) - Starr presented in New York, 1971
 - 27.5 BPA Engineering Review Board - materials and memos, 1968-1985
 - 27.6 Western Systems Coordinating Council, 1967-1975
 - 27.7 UN Economic and Social Council Committee on Electric Power, 1978
 - 27.8 EPRI Information Sheets (17) - Transmission planning, underground cables, HV Transmission, Insulation, Substations, Lightning Protection, Transformers, 1979-1981

- 27.9 Portland Area Cooperative Precipitation Network - data and report, 1983
- 6.028 Bonneville Power Administration - Correspondence and Administrative Records, 1912-1947, 1951, 1957-1958, 1962-1963, 1965, 1967-1975, 1981, 1983
 - 28.1 "Preliminary Instruction Book for Navy Model BN Radio Equipment", 1943
 - 28.2 "Preliminary Instruction Book for Radio Equipment Model BN-1", 1944
 - 28.3 "Preliminary Instruction Book for 1945 Signal Generator Equipment - Model LAF-1", 1945
 - 28.4 "Preliminary Instruction Book for Pulse Analyzer Equipment Models AN/APA-6A and AN/SPA-1", 1945
 - 28.5 Gibbs & Hill Inc. Photographs of Consulting Work, 1912-1947
 - 28.6 "Half a Century of Engineering Progress with Jackson & Moreland", 1951
 - 28.7 Imatran Voimaa Osakeyhtiö 25 Vuotta (Finland) - untranslated, 1957
 - 28.8 Damodar Valley Corporation (DVC) In Prospect and Retrospect, 1958
 - 28.9 Associates Buying Guides, 1962-1963 1965
 - 28.10 Hughes Research Laboratories - publications on HVDC research, 1967-1975
 - 28.11 ASEA Journal, 1981 1983
 - 28.12 "United States Energy Data Book" (General Electric), 1983
- 6.029 Bonneville Power Administration - Correspondence and Administrative Records, 1954, 1964, 1966-1980, 1982, 1984 undated
 - 29.1 Survey Team Report - personnel reductions, 1954
 - 29.2 Pumping Columbia River Water to Southwest, 1964
 - 29.3 Future of BPA, 1966
 - 29.4 Job Applications & resumes + proposed meeting with engineering department heads, 1966-1975
 - 29.5 10th Standard Handbook for Engineers - revision correspondence, 1967
 - 29.6 National Bureau of Standards Sale of Surplus High Voltage Equipment to BPA, 1971
 - 29.7 Siam Meeting - EC Starr gave presentation, 1973
 - 29.8 BPA - Adoption of Metric System in the Section, 1975
 - 29.9 Monthly lists of laboratory and technical reports, October 1976 - May 1979
 - 29.10 Power Shortages - six speeches by Sterling Munro, BPA, 1979-1980
 - 29.11 "Technical Support Document for the proposed BPA Near-Term Resource Policy Statement", 1982
 - 29.12 "Computer Aided Operation of Large Power Systems - summary report" (Zaborsky), 1984
 - 29.13 BPA Unit 3 Technical Specs, undated
 - 29.14 EC Starr BPA File Storage Info , undated
- 6.030 Bonneville Power Administration - Correspondence and Administrative Records, 1923, 1940, 1952-1981 undated
 - 30.1 Luckiamute Dam - measurements and graphs, 1923
 - 30.2 "Completion of North Bonneville Substation for 230 kV Operation", 1940
 - 30.3 IBM Course - 'Data Processing for Engineering Executives' Poughkeepsie, NY - notebook, correspondence, transistors article, and Grand Coulee-Olympia Series Compensation Study (digital), Dec 10-14, 1956
 - 30.4 BPA Analyzer and Digital Computer - policies and studies, 1952-1975
 - 30.5 System Data, 1966-1980
 - 30.6 "1982-1982 F.Y. Transmission System Power Flows Jan and Aug Peak Loads Jan 1981-Aug 1986" (BPA), 1980
 - 30.7 Steno Notebook - data, notes, 1973-1981
 - 30.8 DC Performance Oscillograms, undated
 - 30.9 Handwritten notes and calculations , undated
- 6.031 Bonneville Power Administration - Correspondence and Administrative Records, 1940-1969, 1974-1976
 - 31.1 Unfiled correspondence, reports, and data, 1940-1968
 - 31.2 Unfiled correspondence, reports, and data, 1969
 - 31.3 Unfiled correspondence, reports, and data, 1974
 - 31.4 Unfiled correspondence, reports, and data, 1975-1976
- 6.032 Bonneville Power Administration - Correspondence and Administrative Records, 1977-1988 undated
 - 32.1 "Time to Commercial Introduction of Electricity Generation Technologies" - questionnaire with 7 responses, undated
 - 32.2 copies of correspondence - "reading file", 1979-1983
 - 32.3 Unfiled correspondence, reports, and data, 1977-1979
 - 32.4 Unfiled correspondence, reports, and data, 1980-1983

- 32.5 Unfiled correspondence, reports, and data, 1984-1988 undated
- 6.033 Bonneville Power Administration - Correspondence and Administrative Records, 1964
- 33.1 Atomic Energy Clearing House - Congressional Information Bureau, Inc., 1964

Box**7. United Nations Special Fund Assignment to India, 1957-1959 (2 boxes)**

This small series documents Starr's five-week United Nations consulting assignment in India, the government of which had issued a grant proposal for funds to support power engineering research. A testament to his prestige at that time, Starr was tasked with heading a review of the Indian request.

- 7.001 United Nations Special Fund Assignment to India, 1957-1959
 - 1.1 Informational Materials, 1957-1959
 - 1.2 "India - a Reference Annual" (Publications Division), 1959
 - 1.3 Expenses + Article in BPA Bulletin, 1959
 - 1.4 UN Assignment to India - correspondence, Jun - Aug 1959
- 7.002 United Nations Special Fund Assignment to India, 1958-1959
 - 2.1 Reports (Ministry of Irrigation and Power), 1958-1959
 - 2.2 "Government of India Engineering Research Institute Proposals - Report of Inspection Tour and Discussion Meetings in India with Summary and Recommendations" (EC Starr), 1959
 - 2.3 Correspondence, 1959
 - 2.4 Photostat material (Central Water and Power Commission), 1959

Box**8. Properties of Electricity, 1922-1982 (4 boxes)**

The four boxes comprising Series 8 consist of published and unpublished papers, laboratory data and other assorted materials related to the study of electricity. A subset of these items date to Eugene Starr's years as an undergraduate student at Oregon Agricultural College.

- 8.001 Properties of Electricity, 1938, 1940-1981 undated
 - 1.1 "High Voltage Gaseous-Conductor Lamps" (McMillan & Starr), undated
 - 1.2 Calibration of Dynamometer, Induction Motor, Robbins & Meyers DC Motor, undated
 - 1.3 Drafts of papers on various subjects, undated
 - 1.4 Electric Field Around Points and Equivalent Circuit - drawings, calculations, undated
 - 1.5 "A Low Frequency Harmonic Wave Analyzer" (Hall) - voltage and current wave distortion - draft and multiple final copies, 1938
 - 1.6 Measuring Equipment - drawings, parts lists, 1940-1949
 - 1.7 "Observations of 'Limiting' Effects of Oscillating Detector" (Huggins) - draft and figures, 1943
 - 1.8 Equivalent Reactance Tests - materials, diagrams, 1947-1948
 - 1.9 Ampere-Inch Curves, 1950-1959
 - 1.10 AC Machines, 1942-1981
- 8.002 Properties of Electricity, 1921-1982 undated
 - 2.1 DC Motors - general notes,
 - 2.2 Surface Controlled Mercury Pool Rectifier (Libby),
 - 2.3 "Ultra Short Wave Communication (Larson, Clothier), 1936
 - 2.4 "Impulse Measurements by Repeated-Structure Networks" (Dawes, Thomas, Drought), 1949
 - 2.5 "Bed-Wall Heat Transfer in Fluidized Systems" (Levenspiel), 1954
 - 2.6 Electrostatic Phenomena - a history of electric and magnetic fields with photos, 1957
 - 2.7 "Weak A-C Systems - Response of AC/DC Systems with Low Short Circuit Capacity at the Receiving Terminals" (Clifford, Pokorny), 1968
 - 2.8 Electrostatic Field Measurements (ERDA), 1976

- 2.9 Electricity - papers, 1921-1982
- 8.003 Properties of Electricity, 1922, 1924 undated
 - 3.1 "Juice Reports" Alternating Current Generator Short Circuit Transient Characteristics - OSC oscillograms and notes, undated
 - 3.2 OSC Test Oscillograms - starting current transients of a D-C motor, undated
 - 3.3 OSC Test Oscillograms - voltage wave forms, undated
 - 3.4 Test Results - multiple copies - incandescent lamp test, synchronous condenser test, composite load tests,
 - 3.5 "Instruction for Using the Type C Cathode Ray Oscillograph Tube", 1922
 - 3.6 "The Cathode-Ray Oscillograph" (Dufour) - translation, 1924
 - 3.7 Fault Test Oscillographs - labeled "BBC Tests", undated
- 8.004 Properties of Electricity, 1970 undated
 - 4.1 BPA Power System Oscillations, 1970
 - 4.2 Fault Current Wave Figures for AIEE Proceedings, undated

Box**9. Biographical, 1930-1987 (19 boxes)**

The Biographical series consists of Eugene Starr's personal correspondence, photographs and newspaper clippings, financial records, travel materials and a variety of mementos mostly relating to Starr's long career in electrical engineering.

- 9.001 Personal Correspondence, 1954-1980, 1984
 - 1.1 Personal Correspondence, 1954-1964
 - 1.2 Personal Correspondence, 1965-1971
 - 1.3 Personal Correspondence, 1972-1980
 - 1.4 Personal Correspondence, 1984
- 9.002 Personal Correspondence, 1933, 1943-1983 undated
 - 2.1 Personal notes, letters, calculations, stationary, undated
 - 2.2 Harold Rorden Materials, correspondence, 1955-1959
 - 2.3 Soviet EE Journals Editorial Board - correspondence re: translations (Ralph McElroy Co.), 1970-1971
 - 2.4 Correspondence from Ivan Bloch - energy and power generation, 1968-1974
 - 2.5 Honorary Doctorate Testimonials - 25 letters of endorsement from friends and associates, 1975
 - 2.6 Christmas, birthday, farewell, & post cards, 1933 1962-1979 1983
 - 2.7 Letters, 1943-1983
 - 2.8 Telegrams and reply regarding offer from New York University to Eugene Starr to head Electrical Engineering Department, 1946
- 9.003 Awards and Biographical Newspaper Clippings, 1939-1985
 - 3.1 Honors & Citations - incl. Distinguished Service Award citation & list of publications, 1958
 - 3.2 Department of the Interior 19th Honor Awards Convocation - program (5 copies), 1958
 - 3.3 Professional Engineers of Oregon - Engineer of the Year, 1965
 - 3.4 Hungary Horse News Columbia Falls, MO - obituary on Hal Kanzler (OSU 1943), Jan 27 1967
 - 3.5 Harbshaw Award - congratulations, clippings, 1968-1969
 - 3.6 Hunting Clippings, 1966-1979
 - 3.7 IEEE Lamme Medal - congratulations, brochures, articles, 1980
 - 3.8 Articles and Clippings - including paper by EC Starr on being struck by lightning, 1939-1983
 - 3.9 "History of the Department of Electrical and Computer Engineering, OSU", 1984
 - 3.10 "Electrifying the Northwest: A Technical History of the Bonneville Power Administration" (first draft of contents), 1985
- 9.004 Travel Materials, 1973 undated
 - 4.1 "Iceland in Relation to the Mid-Atlantic Ridge" (Palmason, Soemundsson), 1973
 - 4.2 Maps, Air Atlas', Travel Brochures, undated
- 9.005 Travel Materials, 1958, 1969 undated
 - 5.1 Personal Materials - European Tour, 1958

- 5.2 Roadmaps for California and Oregon, Wallowa-Whitman National Forest brochure, WD-40 brochure, tourist information for Siberia/Soviet Union,
- 5.3 Trip to Moscow - map, brochures, tourist info, 1969
- 9.006 Photographs and Assorted Biographical Materials, 1962, 1964-1977, 1983, 1985-1986 undated
- 6.1 "Sounds from Outer Space" - 45mm + "On the Track of Sasquatch", undated
- 6.2 Dover Book Covers, undated
- 6.3 Assorted jokes and humorous anecdotes, undated
- 6.4 Oregon State Centennial ad, 1968
- 6.5 Photographs - Personal, undated
- 6.6 Motor Trend magazine, June - July 1962
- 6.7 "A Visit to Atomics International" - a photo book including pictures of Starr, November 29-30, 1965
- 6.8 Boeing Supersonic Transport and 747 Brochures, 1969
- 6.9 Time magazine, July 3, 1972
- 6.10 Newsletters - committee of concerned EE's, IEEE Professional Activities, 1976-1977
- 6.11 News about Pay & Societies, 1964-1977
- 6.12 The Planetary Report - periodical of the Planetary Society (6 issues), 1983 1985-1986
- 9.007 French Magazines, 1956, 1963-1965 undated
- 7.1 "Boulogne - Grand Porte de Peche" (Vercel), 1956
- 7.2 "Cahier de la Ceramique du Verre et des Arts du Feu" Volume 32, 1963
- 7.3 "Cahier de la Ceramique du Verre et des Arts du Feu" Volume 33 (2 copies), 1964
- 7.4 "Cahier de la Ceramique du Verre et des Arts du Feu" Volume 34, 1964
- 7.5 "Cahier de la Ceramique du Verre et des Arts du Feu" Volume 35 + supplement, 1965
- 9.008 Photographs, 1920-1929 undated
- 8.1 Photo Factory Camera Brochures,
- 8.2 Photographs from General Electric High Voltage Lab, Pittsfield, 1920-1929
- 8.3 Photos of EC Starr,
- 8.4 Photos of Induced Lightning and Equipment,
- 8.5 8x10 Photographs of HV Structures - labeled "Apollo", undated
- 8.6 Photos of Little Weary Ridge,
- 8.7 Photo of National Reactor Testing Station, Idaho, undated
- 9.009 Investment Information, 1963-1965, 1976, 1980 undated
- 9.1 Mail to EC Starr, undated
- 9.2 Investment Materials - compound interest and annuity tables, unopened investment mail, 1963-1964
- 9.3 Newberry's Annual Report, 1965
- 9.4 GM Public Interest Report, 1976
- 9.5 AMOCO Standard Oil Company publication, 1980
- 9.010 Travel Vouchers and Reimbursement Forms, 1961-1971
- 10.1 Travel and Transportation File - vouchers and reimbursement forms, 1961-1966
- 10.2 Travel and Transportation File - vouchers and reimbursement forms, 1967-1971
- 9.011 Travel Receipts, Vouchers and Reimbursement Forms, 1960-1963, 1972-1976
- 11.1 Travel receipts, 1960-1963
- 11.2 Travel and Transportation File - vouchers and reimbursement forms, 1972-1976
- 9.012 Employment Records, Personal and Medical Data, 1954-1983 undated
- 12.1 Eugene Starr - applications and forms for employment, professional societies, etc., 1956-1977
- 12.2 Personal and Medical Data - passport information, government driver's license renewals, job description - chief engineer,
- 12.3 Starr Employment Records, 1954-1983
- 9.013 Mementos and Keepsakes, undated
- 13.1 3 mementos - battery, cable, insulator, undated
- 13.2 Corona cyclograms - framed graphs, undated
- 13.3 Westinghouse 1945 diary - unused, General Electric 1949 diary - sparsely used, undated
- 13.4 Sparkover - framed photo, undated
- 13.5 United Airlines - 1,000,000 Miler Plaque, undated
- 9.014 Mementos and Keepsakes, 1930, 1952 undated

- 14.1 "Measurements" (Lord Kelvin) + Photo of Lightning, undated
- 14.2 Dance card from OSU Associated Engineers Winter Informal, 1930
- 14.3 ENEL briefcase,
- 14.4 Steno notebook - notes on various topics,
- 14.5 Samples of rubber from Allis-Chalmers Transformer Engineering Section, 1952
- 9.015 Mementos and Keepsakes, undated
- 15.1 Eugene Starr Business Cards,
- 15.2 MICO Instrument Company - metal shavings for Electrical Engineering Department,
- 9.016 Directories, 1983-1988
- 16.1 BPA - Ross Complex Telephone Directory, 1983
- 16.2 BPA directory, 1986
- 16.3 BPA Staffing Charts by Organization, 1986
- 16.4 BPA Telephone Supplement + update, 1985 1987
- 16.5 Federal Telecommunications System - Telephone User's Guide, 1984
- 16.6 IEEE Power Engineering Society Organization Manual and Membership Directory, 1984
- 16.7 Professional Engineers of Oregon 1984/1985 Directory,
- 16.8 Professional Engineers of Oregon 1986/1987 Directory,
- 16.9 Professional Engineers of Oregon 1987/1988 Directory,
- 16.10 US Department of Energy Telephone Directory, 1987
- 9.017 Directories, 1972-1975, 1982-1985
- 17.1 U.S. National Committee CIGRE 1972/1975 Directory,
- 17.2 1983 Directory of U.S. National Committee CIGRE,
- 17.3 1985 Directory of U.S. National Committee CIGRE,
- 17.4 National Academy of Engineering of the United States of America - Directory of Members and Foreign Associates July 1983,
- 17.5 Organization and Members NAS/NAE/IOM/NRC 1982-1983,
- 17.6 Organization and Members NAS/NAE/IOM/NRC 1983-1984,
- 9.018 Telephone / Business Card Files, undated
- 18.1 2 Telephone / Business Card Files from desk,
- 9.019 Telephone / Business Card File, undated
- 19.1 Telephone / Business Card File,

Box**10. Class Materials, 1934-1956 (4 boxes)**

Lectures and curricula developed by Starr for use in the classroom are collected in Series 10. Most of the items in the Class Materials series date to Starr's twenty-seven years on staff at Oregon Agricultural College, known later in his tenure as Oregon State College.

- 10.001 Class Materials, 1939-1952, 1955-1956 undated
- 1.1 EE 311 - Water Rheostat Assignment, undated
- 1.2 EE 312 - Transformers - lecture notes, labs, materials, 1939-1952
- 1.3 EE 321-2-3 - Electrical Laboratory, 1935-1936
- 1.4 EE 321-2-3 Synchronous Motors, 1941-1942
- 1.5 EE 355 - Ignition, undated
- 1.6 EE 405/505 - Synchronous Machines, 1955-1956
- 1.7 EE 405/AST 403 - Introduction to Tensor Analysis - class materials, undated
- 1.8 Transformer Characteristics - class materials, 1943
- 10.002 Class Materials, 1934, 1938-1942, 1948-1949 undated
- 2.1 EE 414 - Electrical Design,
- 2.2 EE 416 - Electrical Circuits - Transients,
- 2.3 EE 422 - Synchronous Machines, 1938-1942
- 2.4 EE 423 - Power Transmission - outlines - originals and duplicates,

- 2.5 EE 432 - Induction machines - class materials,
- 2.6 "Induction Motor Characteristics" (Wagner) - student assignment, 1934
- 2.7 "Induction Machines - EE 432" (Schaufelberger) - student assignment, 1948
- 2.8 "Electric Power Systems - EE 541,542,543" (Armstrong), 1948-1949
- 2.9 "Electric Power Systems - EE 541,2,3" (Gehrig), 1949
- 10.003Class Materials, 1942-1943
- 3.1 Army Specialized Training (AST) Course Outlines, 1943
- 3.2 AST 403 - Electrical Measurements, 1942-1943
- 3.3 AST 405 - Electric and Magnetic Phenomena, 1943
- 3.4 AST 414 - Electric Circuits - experiments, lecture notes, 1943
- 3.5 AST 415 - Electronics and Associated Circuits - lecture notes, labs, quizzes, 1943
- 3.6 AST 416 - Electric Circuits - Transients, 1943
- 3.7 AST 417 - Electric Circuits - Distributed Constants, 1943
- 3.8 AST 420 - High Frequency and Ultra High Frequency (UHF) Circuits, 1943
- 3.9 AST 426 - Radiation & Propagation, 1943
- 10.004Class Materials, 1943, 1949 undated
- 4.1 Electromagnetic Radiation and Induction - lecture notes (EC Starr), 1943
- 4.2 "Transmission Line Problem" (Beauchamp), 1949
- 4.3 Harmonic Analysis, Wave Mixing - lecture notes (EC Starr) - originals and carbons, undated
- 4.4 Heaviside operators, root-square method, equivalent operators - class materials, undated
- 4.5 Lecture Notes and Class Materials - misc., undated