W. Bill Booth Idaho

Guy Norman Washington

Tom Karier Washington



Jennifer Anders Vice Chair Montana

> Tim Baker Montana

Ted Ferrioli Oregon

Richard Devlin Oregon

June 5, 2018

DECISION MEMORANDUM

TO: Council members

FROM: Ben Kujala

Power Division Director

SUBJECT: Renewal of Advisory Committee Charters – CRAC, DFAC, DRAC, GRAC,

NGAC, SAAC and RAAC

PROPOSED ACTION: Authorize the creation of, and approve a two-year charter for

seven (7) of the Council's advisory committees whose charters

are expired or about to expire.

SIGNIFICANCE: Renewal of the committee charters is necessary to ensure the

Council can utilize its advisory committees during the

development of the Seventh Power Plan mid-term assessment

and the start of the Eighth Power Plan process.

BUDGETARY/ECONOMIC IMPACTS

The estimated cost to the Council for organizing and attending the advisory committee meetings including preparation of agendas, meeting materials and meeting minutes along with any teleconference and video meeting support is included in each advisory committee's charter.

BACKGROUND

The Power Act requires the Council produce a regional fish program and electric power plan. The Act authorizes the Council to establish voluntary advisory committees, as necessary or appropriate, to assist the Council in carrying out its statutory responsibilities. The Council utilized these seven advisory committees to provide

503-222-5161 800-452-5161 Fax: 503-820-2370 feedback and advice on a range of technical issues during the development and implementation of the Seventh Power Plan and the redevelopment of the Regional Portfolio Model. Staff believes the advisory committees will continue to prove valuable to the Council in its development of the Seventh Power Plan mid-term assessment, redevelopment of the Council's GENESYS model, and the start of the development of the Eighth Power Plan.

ANALYSIS

Attached are copies of the seven proposed charters. Only the Demand Response Advisory Committee (DRAC) and Demand Forecasting Advisory Committee (DFAC) charters required any updating from the existing charters. The DRAC charter has a reduced estimate of operating costs (shown in redline). The DFAC charter has added natural gas end-use forecasting to the Committee's scope of activity (shown in redline). The other 5 charters are attached but there are no updates recommended at this time.

All charters have been prepared in accordance with the Council's policy on advisory committees and the Federal Advisory Committee Act.

ALTERNATIVES

The Council could obtain advice and input by soliciting feedback one at a time from a diverse group of technical experts rather than meeting collectively as an advisory committee. However, that approach would be time consuming, lack transparency, and miss out on any benefit accrued from promoting and hosting an interactive discussion amongst technical experts.

ATTACHMENTS

Proposed charters for:
Demand Response Advisory Committee
Demand Forecasting Advisory Committee
Conservation Resources Advisory Committee
Generating Resources Advisory Committee
Natural Gas Advisory Committee
Resources Adequacy Advisory Committee
System Analysis Advisory Committee

W. Bill Booth Idaho

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Jennifer Anders Vice Chair Montana

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Richard Devlin Oregon

CHARTER OF THE DEMAND RESPONSE ADVISORY COMMITTEE

- 1. <u>Official Designation</u>: This advisory committee will be known as the Northwest Power and Conservation Council's Demand Response Advisory Committee.
- 2. <u>Background</u>: The Pacific Northwest Electric Power Planning and Conservation Act, P.L. 96-501, 16 U.S.C. §839 <u>et seq</u>. (Act), in Section 4(e)(3)(D), requires the Pacific Northwest Electric Power and Conservation Planning Council (Council) to prepare and adopt a regional conservation and electric power plan that gives priority to resources that the Council determines to be cost-effective. To determine the cost-effectiveness of new resources, it is necessary to estimate the performance, cost, and availability of new resources potentially available to the region. The Demand Response Advisory Committee will assist in the development of reasonable estimates of the performance, cost, and availability of new demand response resources and improvements to the efficiency of the electric power system.

In order to facilitate the development of those resources that the Council determines to be desirable components of the region's future resource mix, the Council must also understand barriers that may exist to the development of these resources, and policies and actions that might be implemented to resolve these barriers. Such policies and actions constitute the research and development element of the power plan called for in the Act. The Demand Response Advisory Committee will assist the Council in the identification of barriers to the development of resources and policies and actions to address these barriers.

This advisory committee is established as part of a network of advisory committees satisfying the Council's obligation under the Act to establish a Scientific and Statistical Advisory Committee. Section 4(c)(11). Under Section 4(a)(4) of the Act, the terms of the Federal Advisory Committee Act, 5 U.S.C. Appendix I, Sections 1-14, apply "to the extent appropriate" to the Council's advisory committees.

- 3. <u>Objectives and Scope of Activity</u>: The Demand Response Advisory Committee will advise the Council during the update and implementation (associated action items from the Seventh Plan provided) of the regional Power Plan by:
 - (A) Assisting the Council in developing common definitions of demand response products that satisfy regional and local requirements. [Action Items RES-4, BPA-3, REG-3]
 - (B) Assisting the Council in identifying technical, cost, environmental, institutional, contractual and other barriers to the development of demand response. [Action Items RES-4, BPA-3]
 - (C) Assisting the Council in developing policies and actions to resolve

barriers to the development of demand response. [Action Items RES-4, BPA-3]

- (D) Assisting the Council by providing feedback and suggestions for improving the effectiveness of the demand response resource development programs and activities in the region, including the evaluation of these resources and the interplay between demand response and energy efficiency. [Action Items RES-4, RES-5, BPA-3]
- (E) Assisting the Council in implementing elements of the Seventh Plan demand response action plan. [Action Items RES-4, RES-5, REG-3, BPA-3]
- (F) Assisting the Council in assessing: 1) the current performance, cost and availability of demand response; 2) technology development trends; and 3) the effect of these trends on the future performance, cost, and availability of demand response resources. [Action Item REG-3, BPA-4]
- (G) Assisting the Council in development of the Eighth Plan's assessment of regional demand response potential. [Action Item REG-3, BPA-4]
- (H) Assisting the Council in development of the Eighth Plan's demand response action plan.
- Official to Whom the Advisory Committee Reports: The Demand Response Advisory Committee will report to the Council's Executive Director.
- 5. <u>Authority of the Advisory Committee</u>: The Demand Response Advisory Committee will serve in an advisory capacity only. Neither the Committee nor its members are authorized to make statements or commitments on behalf of the Council. Non-staff members of the Committee are not Council employees.
- 6. <u>Estimated Annual Operating Costs in Dollars and Person-Days</u>: <u>FiveFour</u>-thousand dollars (\$54,000) per year for travel, teleconference and video conference meetings support; <u>eight-six</u> thousand dollars (\$86,000) per year contracted services for minutes; and thirty staff days to organize and attend committee meetings.
- 7. Advisory Committee Members: Every two years, the chair of the advisory committee, in consultation with the Director of the Power Planning Division, will solicit technical experts to participate on the advisory committee from a wide range of regional stakeholders. The Council's Executive Director shall approve the participants and, in doing so, shall ensure that membership of the advisory committee is fairly balanced in terms of the points of view represented and the functions to be performed by the advisory committee. Committee members shall be selected based primarily on their technical and policy expertise and experience. Members may include representatives of public and investor-owned utilities, Bonneville, the Energy Trust of Oregon, state energy offices, non-utility program implementers, state utility regulators, trade associations, energy efficiency industry firms, public interest groups, and the general public. All Committee members serve at the pleasure of the Council.

If a member is unable to complete the two year term, the organization the member is affiliated with may designate another person to serve for the remainder of the original member's term. All replacement members must be approved by the Executive Director of the Council. The Executive Director shall be responsible for ensuring Council members are timely notified of any such replacement members.

If a member is unable to attend a particular committee meeting, that member may designate another person from his/her organization to attend in his/her place. Members may also

participate in committee meetings electronically via webinar or telephone.

8. <u>Advisory Committee Management Officer</u>: The Advisory Committee Management Officer (Management Officer) for the Demand Response Advisory Committee will be the Director of the Council's Power Planning Division.

9. Chair:

- (A) The Chair of the Demand Response Advisory Committee will be selected by the Executive Director of the Council.
- (B) The Chair may be called upon to report to the Executive Director of the Council on appropriate matters, including the Advisory Committee's progress on the tasks described in Part 3 of this Charter.
- (C) The duties of the Chair will include presiding over Demand Response Advisory Committee meetings, setting agendas for such meetings, ensuring that detailed minutes of such meetings are prepared and submitted to the Executive Director of the Council in a timely manner, and maintaining communication between the Committee and the Council's staff.
- (D) The Chair will certify detailed minutes of meetings of the Demand Response Advisory Committee. The minutes should include a complete and accurate description of matters discussed, conclusions reached, actions taken, persons invited to meet with the Committee, and persons in attendance. The minutes also will include copies of reports received, issued or approved by the Committee. Minutes of meetings will be prepared and released within thirty days of the meeting, unless the Management Officer grants an extension. The Chair will distribute copies of the minutes to members of the Committee and other interested persons.
- (E) Subcommittees or small workgroups of the Demand Response Advisory Committee may be established by the Chair of the Committee to undertake particular aspects of the Committee's work. Methods for organizing the work and procedures of the Committee must follow the scope of responsibilities assigned to the Committee by the Council. Council staff will make arrangements for Committee meetings and provide general support services.

10. Vice-Chair:

- (A) The Vice-Chair of the Demand Response Advisory Committee will be selected by the Executive Director of the Council.
- (B) The Vice-Chair will perform the duties of the Chair of the Committee in the absence of the Chair, and such other duties as the Chair of the Committee may assign.
- 11. Rules: The advisory committee rules approved and adopted by the Council on March 17, 1982, as amended from time to time, will apply to the Demand Response Advisory Committee to the extent such matters are not covered in this Charter.
- 12. <u>Estimated Frequency of Committee Meetings</u>: The Chair of the Demand Response Advisory Committee, after consultation with the Management Officer, or his or her designee, will call meetings as necessary. It is estimated that eight committee meetings over two years will be held. Additional subcommittee meetings may also be held. All meetings will be open to the public, unless closed pursuant to 5 U.S.C. §552b(c). Timely notice of meetings, including agendas, will be made. Interested persons may attend Committee meetings and appear before

- or file statements with the Committee pursuant to the Council's advisory committee rules and subject to such other rules as the Council may prescribe.
- 13. Reimbursement of Expenses: The Council will reimburse public members of the Demand Response Advisory Committee for travel, including per diem in lieu of subsistence, in accordance with the Council's travel regulations for contractors and advisory committee members, for the purpose of attending Committee meetings as authorized by 5 U.S.C. §5703. The Executive Director shall determine who public members are.
- 14. <u>Duration</u>: The Demand Response Advisory Committee will terminate two years from the date this Charter is adopted, unless renewed in accordance with the Federal Advisory Committee Act.

This Charter for the Demand Response Advisory Committee was approved and adopted at a duly noticed meeting of the Northwest Power and Conservation Council, June 12-13, 2018 in Portland, Oregon.

NORTHWEST POWER AND CONSERVATION COUNCIL

By:

James Yost, Chair

W. Bill Booth Idaho

Guy Norman Washington

Tom Karier Washington



Jennifer Anders Vice Chair Montana

> Tim Baker Montana

Ted Ferrioli Oregon

Richard Devlin Oregon

CHARTER OF THE DEMAND FORECASTING ADVISORY COMMITTEE

- 1. <u>Official Designation</u>: This advisory committee will be known as the Northwest Power and Conservation Council's Demand Forecasting Advisory Committee.
- 2. <u>Background</u>: The Pacific Northwest Electric Power Planning and Conservation Act, P.L. 96-501, 16 U.S.C. 839 et seq. (Act), in Section 4(e)(3)(D), requires the Pacific Northwest Electric Power and Conservation Planning Council (Council) to develop "a regional conservation and electric power plan." The plan is to include a twenty year forecast of electricity demands and a resource plan for the development of conservation and generation to meet the demand at the lowest cost consistent with adequate and reliable electricity service. The Demand Forecasting Advisory Committee is being formed to assist the Council in its development of the Pacific Northwest Conservation and Electric Power Plan by advising on important assumptions and analyses regarding the future demand for electricity in the region.

This advisory committee is established as part of a network of advisory committees satisfying the Council's obligation under the Act to establish a Scientific and Statistical Advisory Committee. Section 4(c)(11). Under section 4(a)(4) of the Act, the terms of the Federal Advisory Committee Act, 5 U.S.C. Appendix I, sections 1-14, apply "to the extent appropriate" to the Council's advisory committees.

- 3. <u>Objectives and Scope of Activity</u>: The Demand Forecasting Advisory Committee will advise the Council on subjects related to forecasting the region's future demand for electricity <u>and natural gas</u>. The committee will assist the Council in:
 - (A) Evaluating analytical tools and assumptions related to forecasting the demand for electricity;
 - (B) Advising on designing studies related to forecasting the demand for electricity;
 - (C) Identifying sources of information and data about the demand for electricity and its determinants;
 - (D) Identifying significant changes in electricity markets and their implications for the future demand for electricity and the future price of electricity;
 - (E) Reviewing and interpreting other forecasts of future demand for electricity;
 - (F) Reviewing power planning assumptions or studies that may impact the forecast of electricity demand.
 - (G) With cooperation from natural gas and dual fuel utilities, start forecasting demand for natural gas end use, consistent with the electricity forecast.

- 4. Official to Whom the Advisory Committee Reports: The Demand Forecasting Advisory Committee will report to the Council's Executive Director.
- 5. <u>Authority of the Advisory Committee</u>: The Demand Forecasting Advisory Committee will serve in an advisory capacity only. Neither the Committee nor its members are authorized to make statements or commitments on behalf of the Council. Non-staff members of the Committee are not Council employees.
- 6. Estimated Annual Operating Costs in Dollars and Staff Time: \$8,000 plus one month of staff time.
- 7. Advisory Committee Members: Every two years, the chair of the advisory committee, in consultation with the Director of the Power Planning Division, will solicit technical experts to participate on the advisory committee from a wide range of regional stakeholders. The Council's Executive Director shall approve the participants and, in doing so, shall ensure that membership of the advisory committee is fairly balanced in terms of the points of view represented and the functions to be performed by the advisory committee. Committee members shall be selected based primarily on their technical and policy expertise and experience. Members may include representatives of public and investor-owned utilities, Bonneville, state energy offices, non-utility program implementers, state utility regulators, trade associations, demand response industry firms, public interest groups, and the general public. All Committee members serve at the pleasure of the Council.

If a member is unable to complete the two year term, the organization the member is affiliated with may designate another person to serve for the remainder of the original member's term. All replacement members must be approved by the Executive Director of the Council. The Executive Director shall be responsible for ensuring Council members are timely notified of any such replacement members.

If a member is unable to attend a particular committee meeting, that member may designate another person from his/her organization to attend in his/her place. Members may also participate in committee meetings electronically via webinar or telephone.

8. <u>Advisory Committee Management Officer</u>: The Advisory Committee Management Officer (Management Officer) for the Demand Forecasting Advisory Committee will be the Director of the Council's Power Planning Division. The Management Officer will designate members of the Council's staff to coordinate and attend meetings of the Committee.

9. Chair:

- (A) The Chair of the Demand Forecasting Advisory Committee will be selected by the Executive Director of the Council.
- (B) The Chair may be called upon to report to the Executive Director of the Council on appropriate matters, including the Advisory Committee's progress on the tasks described in Part 3 of this Charter.
- (C) The duties of the Chair will include presiding over Demand Forecasting Advisory Committee meetings, setting agendas for such meetings, ensuring that detailed minutes of such meetings are prepared and submitted to the Executive Director of the Council in a timely manner, and maintaining communication between the Committee and the Council's staff.
- (D) The Chair will certify detailed minutes of meetings of the Demand Forecasting Advisory Committee. The minutes should include a complete and accurate description of matters discussed, conclusions reached, actions taken, persons invited to meet with the Committee, and persons in attendance. The minutes also will include copies of reports received, issued or approved by the Committee. Minutes of meetings will be prepared and released within ten days of the meeting, unless the Management Officer grants an extension. The Chair will distribute copies of the minutes to members of the Committee and the other interested persons.

(E) Subcommittees or small workgroups of the Demand Forecasting Advisory Committee may be established by the Chair of the Committee to undertake particular aspects of the Committee's work. Methods for organizing the work and procedures of the Committee must follow the scope of responsibilities assigned to the Committee by the Council. Council staff will make arrangements for Committee meetings and provide general support services.

10. Vice-Chair:

- (A) The Vice-Chair of the Demand Forecasting Advisory Committee may be selected by the Executive Director of the Council.
- (B) The Vice-Chair will perform the duties of the Chair of the Committee, in the absence of the Chair, and such other duties as the Chair of the Committee may assign.
- 11. <u>Rules</u>: The advisory committee rules approved and adopted by the Council on March 17, 1982, as amended from time to time, will apply to the Demand Forecasting Advisory Committee to the extent such matters are not covered in this Charter.
- 12. <u>Estimated Frequency of Committee Meetings</u>: The Chair of the Demand Forecasting Advisory Committee, after consultation with the Management Officer, or his or her designee, will call meetings as necessary. All meetings will be open to the public, unless closed pursuant to 5 U.S.C. 552b(c). Timely notice of meetings, including agendas, will be made. Interested persons may attend Committee meetings and appear before or file statements with the Committee pursuant to the Council's advisory committee rules and subject to such other rules as the Council may prescribe.
- 13. <u>Reimbursement of Expenses</u>: The Council will reimburse public members of the Demand Forecasting Advisory Committee for travel, including per diem in lieu of subsistence, in accordance with the Council's travel regulations for contractors and advisory committee members, for the purpose of attending Committee meetings as authorized by 5 U.S.C. §5703. The Executive Director shall determine who public members are.
- 14. <u>Duration</u>: The Demand Forecasting Advisory Committee will terminate two years from the date this Charter is adopted, unless renewed in accordance with the Federal Advisory Committee Act.

This Charter for the Demand Forecasting Advisory Committee was approved and adopted at a duly called meeting of the Northwest Power and Conservation Council, June 12-13, 2018 in Portland, Oregon.

NORTHWEST POWER AND CONSERVATION COUNCIL

By:

James Yost, Chair

W. Bill Booth

Guy Norman Washington

Tom Karier Washington



Jennifer Anders Vice Chair Montana

> Tim Baker Montana

Ted Ferrioli Oregon

Richard Devlin Oregon

CHARTER OF THE CONSERVATION RESOURCES ADVISORY COMMITTEE

- Official Designation: This advisory committee will be known as the Northwest Power and Conservation Council's Conservation Resources Advisory Committee.
- 2. <u>Background</u>: The Pacific Northwest Electric Power Planning and Conservation Act, P.L. 96-501, 16 U.S.C. §839 <u>et seq.</u> (Act), in Section 4(e)(1), requires the Pacific Northwest Electric Power and Conservation Planning Council (Council) to prepare and adopt a regional conservation and electric power plan that gives priority to resources that the Council determines to be cost-effective. To determine the cost-effectiveness of new resources, it is necessary to estimate the performance, cost, and availability of new resources potentially available to the region. The Conservation Resources Advisory Committee will assist in the development of reasonable estimates of the performance, cost, and availability of new conservation resources and improvements to the efficiency of the electric power system.

In order to facilitate the development of those resources that the Council determines to be desirable components of the region's future resource mix, the Council must also understand barriers that may exist to the development of these resources, and policies and actions that might be implemented to resolve these barriers. Such policies and actions constitute the research and development element of the power plan called for in the Act. The Conservation Resources Advisory Committee will assist the Council in the identification of barriers to the development of resources and policies and actions to address these barriers.

This advisory committee is established as part of a network of advisory committees satisfying the Council's obligation under the Act to establish a Scientific and Statistical Advisory Committee.

Section 4(c)(11). Under Section 4(a)(4) of the Act, the terms of the Federal Advisory Committee Act, 5 U.S.C. Appendix I, Sections 1-14, apply "to the extent appropriate" to the Council's advisory committees.

- 3. <u>Objectives and Scope of Activity</u>: The Conservation Resources Advisory Committee will advise the Council during the update and implementation of the regional Power Plan by:
 - (I) Assisting the Council in assessing: 1) the current performance, cost and availability of conservation resources; 2) technology development trends; and 3) the effect of these trends on the future performance, cost and availability of conservation resources.
 - (J) Assisting the Council in identifying technical, cost, environmental, institutional and other barriers to the development of conservation resources.
 - (K) Assisting the Council in developing policies and actions to resolve

barriers to the development of conservation resources.

- (L) Assisting the Council by providing feedback and suggestions for improving the effectiveness of the conservation resource development programs and activities in the region.
- (M) Assisting the Council in implementing elements of the Seventh Plan conservation action plan.
- (N) Assisting the Council in development of the Eighth Plan's assessment of regional conservation potential
- (O) Assisting the Council in development of the Eighth Plan's conservation action plan
- 4. Official to Whom the Advisory Committee Reports: The Conservation Resources Advisory Committee will report to the Council's Executive Director.
- Authority of the Advisory Committee: The Conservation Resources Advisory Committee will serve in an advisory capacity only. Neither the Committee nor its members are authorized to make statements or commitments on behalf of the Council. Non-staff members of the Committee are not Council employees.
- 6. <u>Estimated Annual Operating Costs in Dollars and Person-Days</u>: One-thousand dollars (\$1,000) per year for travel, teleconference and video conference meetings support; two thousand dollars (\$2,000) per year contracted services for minutes; and six staff days to organize and attend committee meetings.
- 7. Advisory Committee Members: Every two years, the chair of the advisory committee, in consultation with the Director of the Power Planning Division, will solicit technical experts to participate on the advisory committee from a wide range of regional stakeholders. The Council's Executive Director shall approve the participants and, in doing so, shall ensure that membership of the advisory committee is fairly balanced in terms of the points of view represented and the functions to be performed by the advisory committee. Committee members shall be selected based primarily on their technical and policy expertise and experience. Members may include representatives of public and investor-owned utilities, Bonneville, the Energy Trust of Oregon, state energy offices, non-utility program implementers, state utility regulators, trade associations, energy efficiency industry firms, public interest groups, and the general public. All Committee members serve at the pleasure of the Council.

If a member is unable to complete the two year term, the organization the member is affiliated with may designate another person to serve for the remainder of the original member's term. All replacement members must be approved by the Executive Director of the Council. The Executive Director shall be responsible for ensuring Council members are timely notified of any such replacement members.

If a member is unable to attend a particular committee meeting, that member may designate another person from his/her organization to attend in his/her place. Members may also participate in committee meetings electronically via webinar or telephone.

- 8. <u>Advisory Committee Management Officer</u>: The Advisory Committee Management Officer (Management Officer) for the Conservation Resources Advisory Committee will be the Director of the Council's Power Planning Division.
- 9. Chair:
 - a. The Chair of the Conservation Resources Advisory Committee will be selected by

the Executive Director of the Council.

- b. The Chair may be called upon to report to the Executive Director of the Council on appropriate matters, including the Advisory Committee's progress on the tasks described in Part 3 of this Charter.
- c. The duties of the Chair will include presiding over Conservation Resources Advisory Committee meetings, setting agendas for such meetings, ensuring that detailed minutes of such meetings are prepared and submitted to the Executive Director of the Council in a timely manner, and maintaining communication between the Committee and the Council's staff.
- d. The Chair will certify detailed minutes of meetings of the Conservation Resources Advisory Committee. The minutes should include a complete and accurate description of matters discussed, conclusions reached, actions taken, persons invited to meet with the Committee, and persons in attendance. The minutes also will include copies of reports received, issued or approved by the Committee. Minutes of meetings will be prepared and released within thirty days of the meeting, unless the Management Officer grants an extension. The Chair will distribute copies of the minutes to members of the Committee and other interested persons.
- e. Subcommittees or small workgroups of the Conservation Resources Advisory Committee may be established by the Chair of the Committee to undertake particular aspects of the Committee's work. Methods for organizing the work and procedures of the Committee must follow the scope of responsibilities assigned to the Committee by the Council. Council staff will make arrangements for Committee meetings and provide general support services.

10. Vice-Chair:

- The Vice-Chair of the Conservation Resources Advisory Committee will be selected by the Executive Director of the Council.
- b. The Vice-Chair will perform the duties of the Chair of the Committee in the absence of the Chair, and such other duties as the Chair of the Committee may assign.
- 11. <u>Rules</u>: The advisory committee rules approved and adopted by the Council on March 17, 1982, as amended from time to time, will apply to the Conservation Resources Advisory Committee to the extent such matters are not covered in this Charter.
- 12. <u>Estimated Frequency of Committee Meetings</u>: The Chair of the Conservation Resources Advisory Committee, after consultation with the Management Officer, or his or her designee, will call meetings as necessary. It is estimated that two committee meetings over two years will be held. Additional subcommittee meetings may also be held. All meetings will be open to the public, unless closed pursuant to 5 U.S.C. §552b(c). Timely notice of meetings, including agendas, will be made. Interested persons may attend Committee meetings and appear before or file statements with the Committee pursuant to the Council's advisory committee rules and subject to such other rules as the Council may prescribe.
- 13. Reimbursement of Expenses: The Council will reimburse public members of the Conservation Resources Advisory Committee for travel, including per diem in lieu of subsistence, in accordance with the Council's travel regulations for contractors and advisory committee members, for the purpose of attending Committee meetings as authorized by 5 U.S.C. §5703. The Executive Director shall determine who public members are.

14. <u>Duration</u>: The Conservation Resources Advisory Committee will terminate two years from the date this Charter is adopted, unless renewed in accordance with the Federal Advisory Committee Act.

This Charter for the Conservation Resources Advisory Committee was approved and adopted at a duly noticed meeting of the Northwest Power and Conservation Council, June 12-13, 2018 in Portland, Oregon.

NORTHWEST POWER AND CONSERVATION COUNCIL

Ву:

James Yost, Chair

W. Bill Booth Idaho

Guy Norman Washington

Tom Karier Washington



Jennifer Anders Vice Chair Montana

> Tim Baker Montana

Ted Ferrioli Oregon

Richard Devlin Oregon

CHARTER OF THE NATURAL GAS ADVISORY COMMITTEE

- 1. <u>Official Designation</u>: This advisory committee will be known as the Northwest Power and Conservation Council's Natural Gas Advisory Committee.
- 2. <u>Background</u>: The Pacific Northwest Electric Power Planning and Conservation Act, P.L. 96-501, 16 U.S.C. §839 <u>et seq</u>. (Act), in Section 4(d)(1), requires the Pacific Northwest Electric Power and Conservation Planning Council (Council) to develop "a regional conservation and electric power plan." The plan is to include a twenty year forecast of electricity demand and a resource plan for the development of conservation and generation to meet the demand at the lowest cost consistent with adequate and reliable electricity service. Natural gas plays an important role in both the forecast of electricity demands and the cost of electricity generation using natural gas fueled alternatives. The Natural Gas Advisory Committee is being formed to assist the Council in the development and implementation of the Northwest Conservation and Electric Power Plan (power plan) by advising on important assumptions and analyses regarding the natural gas markets in the region.

This advisory committee is established as part of a network of advisory committees satisfying the Council's obligation under the Act to establish a Scientific and Statistical Advisory Committee. Section 4(c)(11). Under Section 4(a)(4) of the Act, the terms of the Federal Advisory Committee Act, 5 U.S.C. Appendix I, sections 1-14, apply "to the extent appropriate" to the Council's advisory committees.

- 3. <u>Objectives and Scope of Activity</u>: The Natural Gas Advisory Committee will advise the Council during the development and implementation of its power plan of changing conditions in the natural gas markets and their implications for the Council's plan by:
 - (A) Assisting the Council in identifying significant changes in natural gas markets and their implications for future gas supplies and prices;
 - (B) Providing guidance on the availability and deliverability of natural gas to electric generation plants as part of the assessment of resource adequacy;
 - (C) Assisting the Council in evaluating new analytical tools, and advising on the most appropriate study designs; and
 - (D) Helping to identify sources of information and data, and suggesting ways that electric and gas utilities can cooperate in analysis and planning.
- Official to Whom the Advisory Committee Reports: The Natural Gas Advisory Committee will report to the Council's Executive Director.
- 5. <u>Authority of the Advisory Committee</u>: The Natural Gas Advisory Committee will serve in an

advisory capacity only. Neither the Committee nor its members are authorized to make statements or commitments on behalf of the Council. Non-staff members of the Committee are not Council employees.

- 6. <u>Estimated Annual Operating Costs in Dollars and Staff Time</u>: \$8,000 plus two weeks of staff time per year.
- 7. Advisory Committee Members: Every two years, the chair of the advisory committee, in consultation with the Director of the Power Planning Division, will solicit technical experts to participate on the advisory committee from a wide range of regional stakeholders. The Council's Executive Director shall approve the participants and, in doing so, shall ensure that membership of the advisory committee is fairly balanced in terms of the points of view represented and the functions to be performed by the advisory committee.

Committee members shall be selected based primarily on their technical expertise and experience. Members may include regional electric or gas utilities, natural gas pipeline companies, natural gas suppliers as well as utility commission, and public interest groups. All Committee members serve at the pleasure of the Council.

If a member is unable to complete the two year term, the organization the member is affiliated with may designate another person to serve for the remainder of the original member's term. All replacement members must be approved by the Executive Director of the Council. The Executive Director shall be responsible for ensuring Council members are timely notified of any such replacement members.

If a member is unable to attend a particular committee meeting, that member may designate another person from his/her organization to attend in his/her place. Members may also participate in committee meetings electronically via webinar or telephone.

8. Advisory Committee Management Officer: The Advisory Committee Management Officer (Management Officer) for the Natural Gas Advisory Committee will be the Director of the Council's Power Planning Division. The Management Officer will designate members of the Council's staff to coordinate and attend meetings of the Committee.

9. Chair:

- (A) The Chair of the Natural Gas Advisory Committee will be selected by the Executive Director of the Council.
- (B) The Chair may be called upon to report to the Executive Director of the Council on appropriate matters, including the Advisory Committee's progress on the tasks described in Part 3 of this Charter.
- (C) The duties of the Chair will include presiding over Natural Gas Advisory Committee meetings, setting agendas for meetings, ensuring that detailed minutes of meetings are prepared and submitted to the Executive Director of the Council in a timely manner, and maintaining communication between the Committee and the Council's staff.
- (D) The Chair will certify detailed minutes of meetings of the Natural Gas Advisory
 Committee. The minutes should include a complete and accurate description of matters
 discussed, conclusions reached, actions taken, persons invited to meet with the
 Committee, and persons in attendance. The minutes also will include copies of reports
 received, issued or approved by the Committee. Minutes of meetings will be prepared and
 released within ten days of the meeting, unless the Management Officer grants an
 extension. The Chair will distribute copies of the minutes to members of the Committee

and the other interested persons.

(E) Subcommittees or small workgroups of the Natural Gas Advisory Committee may be established by the Chair of the Committee to undertake particular aspects of the Committee's work. Methods for organizing the work and procedures of the Committee must follow the scope of responsibilities assigned to the Committee by the Council. Council staff will make arrangements for Committee meetings and provide general support services.

10. Vice-Chair:

- (A) A Vice-Chair of the Natural Gas Advisory Committee may be appointed from Council staff by the Council's Executive Director.
- (B) The Vice-Chair will perform the duties of the Chair of the Committee in the absence of the Chair, and such other duties as the Chair of the Committee may assign.
- 11. <u>Rules</u>: The advisory committee rules approved and adopted by the Council on March 17, 1982, as amended from time to time, will apply to the Natural Gas Advisory Committee to the extent such matters are not covered in this Charter.
- 12. Estimated Frequency of Committee Meetings: The Chair of the Natural Gas Advisory Committee, after consultation with the Management Officer, or his or her designee, will call meetings as necessary. All meetings will be open to the public, unless closed pursuant to 5 U.S.C. §552b(c). Timely notice of meetings, including agendas, will be made. Interested persons may attend Committee meetings and appear before or file statements with the Committee pursuant to the Council's advisory committee rules and subject to such other rules as the Council may prescribe.
- 13. Reimbursement of Expenses: The Council will reimburse public members of the Natural Gas Advisory Committee for travel, including per diem in lieu of subsistence in accordance with the Council's travel regulations for contractors and advisory committee members, for the purpose of attending Committee meetings as authorized by 5 U.S.C. §5703. The Executive Director shall determine who public members are.
- 14. <u>Duration</u>: The Natural Gas Advisory Committee will terminate two years from the date this Charter is adopted unless renewed in accordance with the Federal Advisory Committee Act.

This charter for the Natural Gas Advisory Committee was approved and adopted at a duly called meeting of the Northwest Power and Conservation Council, June 12-13, 2018 in Portland, Oregon.

NORTHWEST POWER AND CONSERVATION COUNCIL

Ву:

James Yost, Chair

W. Bill Booth Idaho

Guy Norman Washington

Tom Karier Washington



Jennifer Anders Vice Chair Montana

> Tim Baker Montana

Ted Ferrioli Oregon

Richard Devlin Oregon

CHARTER OF THE RESOURCE ADEQUACY ADVISORY COMMITTEE

- 1. <u>Official Designation</u>: This committee will be known as the Northwest Power and Conservation Council Resource Adequacy Advisory Committee.
- 2. <u>Background</u>: The Pacific Northwest Electric Power Planning and Conservation Act, P.L. 96-501, 16 U.S.C. §839 <u>et seq.</u> (Act), in Section 4(d)(1), requires the Power and Conservation Council (Council) to prepare and adopt a regional conservation and electric power plan. The purpose of the power plan and one of the central purposes of the Act is to assure the Pacific Northwest an adequate, efficient, economical, and reliable power supply. The plan must include a demand forecast of at least twenty years and a forecast of power resources estimated by the Council to be required to meet the Bonneville Power Administrator's obligations, as well as an analysis of reserve and reliability requirements so as to insure adequate electric power at the lowest probable cost.

In 2005, the Council and the Bonneville Power Administration created the Resource Adequacy Forum (Forum) to aid the Council in developing an adequacy standard for the regional power supply and to use that standard to annually evaluate the adequacy of the power supply. The Forum, open to the public, included utility planners, state utility commission staff, and other interested parties. In 2008, the Forum reached consensus on a standard, which was adopted by the Council in April of 2008 and was used to develop the Sixth Power Plan. After an extensive peer review of the methodology in the following years, the Forum proposed a revised standard to the Council who subsequently adopted the revisions in December of 2011. The Council utilizes the standard in its power plan to ensure that future resource strategies will provide adequate power supplies. The Council also uses the standard to annually assess the adequacy of the region's power supply five years out, as an early warning should resource development fall short of demand growth for whatever reason. Given the importance of resource adequacy toward the development of the power plan, the Council chose to convert the ad-hoc Resource Adequacy Forum into the Resource Adequacy Advisory Committee (RAAC) – a more formally defined committee with federal guidelines regarding membership and function.

- 3. Objectives and Scope of Activity: The RAAC will advise the Council by:
 - (A) Aiding Council staff in preparing and submitting to the Council an annual assessment of the adequacy of the region's power supply.
 - (B) Advising the Council on developing or modifying regional resource adequacy metrics.

- (C) Advising the Council on issues related to resource adequacy, for example by recommending methods to quantify how various types of resources contribute to power supply adequacy and how to best incorporate generating reserves into the assessment.
- (D) Assisting in incorporating the regional resource adequacy standard and metrics into development of the Council's Northwest Power Plans.
- 4. <u>Structure and Organization</u>: To carry out these objectives the RAAC will be comprised of a technical committee and a steering committee. The function of the technical committee will be to collect and review relevant data and to aid in the enhancement of analytical tools used for the analysis. The function of the steering committee will be to provide policy related recommendations to the Council for use in performing regional resource adequacy assessments and to periodically review methodologies used for those assessments.

For example, to carry out objective (A) described above, the technical committee will gather and review load, resource and other relevant data. The steering committee will then review that data and make policy-related recommendations to the Council, which are needed to proceed with the analysis. Such recommendations may include, for example, an assumed level of reliance on market supplies. After review and approval by the Council, staff will prepare a preliminary adequacy assessment for review by the technical and steering committees. The Council will be briefed on the results of the preliminary assessment. Should any adjustments to the analyses be needed, proposed changes will be reviewed by both RAAC committees. Council staff will then prepare a final assessment for presentation to the Council for review, approval and release.

The technical and steering committees shall work together to accomplish the objectives of the RAAC. The RAAC's committees shall operate on a consensus basis to the extent practicable. Neither committee shall have the authority to overrule the other committee. If a situation arises where there is a difference of opinion between the two committees as to how to proceed with the work of the RAAC, the matter shall be brought to the Council for resolution.

- 5. <u>Advisory Committee Management Officer</u>: The Management Officer for the RAAC will be the Director of the Council's Power Planning Division. The Management Officer will designate a member of the Council's staff to coordinate and schedule meetings of the RAAC.
- 6. <u>Co-Chairs</u>: The steering and technical committees will each have one co-chair from the Council and one co-chair from the Bonneville Power Administration.
 - (A) The Chair of the Council, in consultation with the Chair of the Power Committee, Executive Director of the Council, Director of the Council's Power Planning Division, and Bonneville Power Administration, will appoint the co-chairs of the steering and the technical committees. The Bonneville co-chair will be recommended by the Bonneville administrator.
 - (B) The Co-Chairs may be called upon to report to the Executive Director on appropriate matters, including the RAAC's progress on the tasks described in Part 3 of this charter.
 - (C) The duties of the Co-Chairs will include presiding over the meetings of the steering and technical committee which they chair, setting agendas for such meetings, ensuring that detailed minutes of such meetings are prepared and submitted to the Executive Director of the Council in a timely manner, and maintaining communication between the committee and the Council's staff.

- (D) The steering committee and technical committee co-chairs will certify detailed minutes of meetings of their respective groups. The minutes should include a complete and accurate description of matters discussed, conclusions reached, actions taken, persons invited to meet with the RAAC, and persons in attendance. The minutes also will include copies of reports received, issued or approved by each committee. Minutes of meetings will be prepared and released within ten days of the meeting, unless the Management Officer grants an extension. The co-chairs will distribute copies of the minutes to members of both the RAAC's committees and all minutes shall be posted on the Council's website in a timely manner following the distribution of the minutes.
- 7. Advisory Committee Members: The co-chairs of the RAAC's technical and steering committees, in consultation with the Director of the Power Planning Division and the Council's Executive Director, will solicit policy and technical experts to participate on the RAAC's steering and technical committees from a wide range of regional stakeholders. Steering committee members shall be selected based primarily on their policy expertise and experience. Technical committee members shall be selected based primarily on their technical skills and experience. The co-chairs will recommend to the Council a set of participants for both committees. The Council shall make the final decision to approve the participants in the RAAC's committees and, in doing so, shall ensure that membership of the advisory committee is fairly balanced in terms of the points of view represented and the functions to be performed by the advisory committee. Co-chairs may appoint replacements from the same organization if any member is unable to serve.

Members may include representatives of public and investor-owned utilities, Bonneville and other federal agencies, state energy offices, state utility regulators, trade associations, energy efficiency and renewable resource associations, independent power producers, public interest groups, and the general public.

- 8. <u>Subcommittees:</u> Subcommittees or small workgroups of the RAAC steering and technical committees may be established by the co-chairs of the committees to undertake particular aspects of that committee's work. Methods for organizing the work and procedures of RAAC committees must follow the scope of responsibilities assigned to the RAAC by the Council. Council staff will make arrangements for committee meetings and will provide general support services.
- 9. <u>Estimated Frequency of Committee Meetings</u>: The Co-Chairs of the RAAC steering and technical committees, after consultation with the Management Officer, or his or her designee, will call meetings as necessary. It is estimated that the steering committee and the technical committee will each meet three times per year. Additional subcommittee meetings may also be held as necessary. All meetings will be open to the public, unless closed pursuant to 5 U.S.C. §552b(c). Timely notice of meetings, including agendas, will be made. Interested persons may attend RAAC committee meetings and appear before or file statements with the Committee subject to such reasonable rules as the Council may prescribe.
- 10. Official to Whom the Committee Reports: The Committee will report to the Council's Executive Director.
- 11. <u>Authority of the Committee</u>: The Committee will serve in an advisory capacity only. Neither the Committee nor its members are authorized to make statements or commitments on behalf of the Council. Committee members are not Council employees by virtue of their membership on the Committee.
- 12. <u>Reimbursement of Expenses</u>: The Council will reimburse public members of the RAAC committees for travel, including per diem in lieu of subsistence, in accordance with the Council's

travel regulations for contractors and advisory committee members, for the purpose of attending Committee meetings as authorized by 5 U.S.C. §5703. The Executive Director shall determine who public members are.

- 13. Estimated Annual Operating Costs in Dollars and Person-Days: Ten thousand dollars (\$10,000) per year for teleconference and video conference meeting support, contracted services for minutes and reimbursement of expenses; and six (6) months of one Council staff person's time to schedule meetings, collect and process meeting material, facilitate meetings, coordinate data vetting processes, oversee model enhancement efforts and perform analysis related to adequacy assessments.
- 14. Rules: The Advisory Committee rules approved and adopted by the Council on March 17, 1982, as amended from time to time, will apply to the RAAC to the extent such matters are not covered in this charter.
- 15. <u>Duration</u>: The RAAC will terminate two years from the date this Charter is adopted, unless renewed in accordance with the Federal Advisory Committee Act.

This Charter for the Resource Adequacy Advisory Committee was approved and adopted at a duly noticed meeting of the Northwest Power and Conservation Council, June 12-13, 2018 in Portland, Oregon.

NORTHWEST POWER AND CONSERVATION COUNCIL

By:

James Yost, Chair

W. Bill Booth Idaho

Guy Norman Washington

Tom Karier Washington



Jennifer Anders Vice Chair Montana

> Tim Baker Montana

Ted Ferrioli Oregon

Richard Devlin Oregon

CHARTER OF THE SYSTEM ANALYSIS ADVISORY COMMITTEE

- 1. <u>Official Designation:</u> This advisory committee will be known as the Northwest Power and ConservationCouncil's System Analysis Advisory Committee.
- 2. <u>Background:</u> The Pacific Northwest Electric Power Planning and Conservation Act, P.L. 96-501, 16 U.S.C. §839 <u>et seq.</u> (Act), in Section 4(d)(1), requires the Pacific Northwest Electric Power and Conservation Planning Council (Council) to develop "a regional conservation and electric power plan." The plan is to include a twenty-year forecast of electricity demand and a resource plan for the development of conservation and generation to meet the demand at the lowest cost, consistent withadequate and reliable electricity service. The System Analysis Advisory Committee will assist the Council in its development and amendment of the Northwest Conservation and Electric Power Plan (power plan) by advising on data, assumptions and analyses regarding power system modeling including resource portfolio and production cost modeling.

This advisory committee is established as part of a network of advisory committees satisfying the Council'sobligation under the Act to establish a Scientific and Statistical Advisory Committee. Section 4(c)(11). Under Section 4(a)(4) of the Act, the terms of the Federal Advisory Committee Act, 5 U.S.C. Appendix I, sections 1-14, apply "to the extent appropriate" to the Council's advisory committees.

- Objectives and Scope of Activity: The System Analysis Advisory Committee will advise the Council regarding power system models having significance to the development and implementation of the power plan. Activities of the committee will include:
 - (A) Reviewing the information and assumptions regarding portfolio modeling.
 - (B) Assisting in developing of parameter and model assumptions for representing power system operations.
 - (C) Reviewing the information and assumptions regarding the wholesale electric power price forecast.
- 4. Official to Whom the Advisory Committee Reports: The System Analysis Advisory Committee will report to the Council's Executive Director.
- 5. <u>Authority of the Advisory Committee:</u> The System Analysis Advisory Committee will serve in an advisory capacity only. Neither the Committee nor its members are authorized to make statements or commitments on behalf of the Council. Non-staff members of the Committee

are not Council employees.

- 6. <u>Estimated Annual Operating Costs in Dollars and Staff Time:</u> Five-thousand dollars (\$5,000) per year for travel, teleconference and video conference meetings support; eight thousand dollars (\$8,000) per year contracted services for minutes; and thirty staff days to organize and attend committee meetings.
- 7. Advisory Committee Members: Every two years, the chair of the advisory committee, in consultation withthe Director of the Power Planning Division will solicit technical experts to participate on the advisory committee from a wide range of regional stakeholders. The Council's Executive Director shall approve the participants and, in doing so, shall ensure that membership of the advisory committee is fairly balanced in terms of the points of view represented and the functions to be performed by the advisory committee.

Committee members shall be selected based primarily on their technical expertise and experience. Members may include electric and gas public and private utilities, experts in the regional economy, stateenergy offices, Bonneville, the Energy Trust of Oregon, non-utility program implementers, state utility regulators, trade associations, energy efficiency industry firms, public interest groups, and the general public. All committee members serve at the pleasure of the Council.

If a member is unable to complete the two year term, the organization the member is affiliated with maydesignate another person to serve for the remainder of the original member's term. All replacement members must be approved by the Executive Director of the Council. The Executive Director shall be responsible for ensuring Council members are timely notified of any such replacement members.

If a member is unable to attend a particular committee meeting, that member may designate anotherperson from his/her organization to attend in his/her place. Members may also participate in committee meetings electronically via webinar or telephone.

8. <u>Advisory Committee Management Officer:</u> The Advisory Committee Management Officer (Management Officer) for the System Analysis Advisory Committee will be the Director of the Council's Power Planning Division.

9. Chair:

- (A) The Chair of the System Analysis Advisory Committee will be selected by the Executive Director of the Council.
- (B) The Chair may be called upon to report to the Executive Director of the Council on appropriate matters, including the Advisory Committee's progress on the tasks described in Part 3 of this Charter.
- (C) The duties of the Chair will include presiding over System Analysis Advisory Committee meetings, setting agendas for such meetings, ensuring that detailed minutes of such meetings are prepared and submitted to the Executive Director of the Council in a timely manner, andmaintaining communication between the Committee and the Council's staff.
- (D) The Chair will certify detailed minutes of meetings of the System Analysis Advisory Committee. The minutes should include a complete and accurate description of matters discussed, conclusions reached, actions taken, persons invited to meet with the Committee, andpersons in attendance. The minutes also will include copies of reports received, issued or approved by the Committee. Minutes of meetings will be prepared and released within thirty days of the meeting, unless the Management Officer grants an extension. The Chair will distribute copies of the minutes to members of the Committee and other interested persons.

(E) Subcommittees or small workgroups of the System Analysis Advisory Committee may be established by the Chair of the Committee to undertake particular aspects of the Committee'swork. Methods for organizing the work and procedures of the Committee must follow the scope of responsibilities assigned to the Committee by the Council. Council staff will make arrangements for Committee meetings and provide general support services.

10. Vice-Chair:

- (A) A Vice-Chair of the System Analysis Advisory Committee may be appointed from Council staff by the Council's Executive Director.
- (B) The Vice-Chair will perform the duties of the Chair of the Committee in the absence of the Chair, and such other duties as the Chair of the Committee may assign.
- 11. <u>Rules:</u> The advisory committee rules approved and adopted by the Council on March 17, 1982, as amended from time to time, will apply to the System Analysis Advisory Committee to the extent such matters are not covered in this Charter.
- 12. <u>Estimated Frequency of Committee Meetings:</u> The Chair of the System Analysis Advisory Committee, after consultation with the Management Officer, or his or her designee, will call meetings as necessary. All meetings will be open to the public, unless closed pursuant to 5 U.S.C. §552b(c). Timely notice of meetings, including agendas, will be made. Interested persons may attend Committee meetings and appear before or file statements with the Committee pursuant to the Council's advisory committee rules and subject to such other rules as the Council may prescribe.
- 13. Reimbursement of Expenses: The Council will reimburse public members of the System Analysis Advisory Committee for travel, including per diem in lieu of subsistence in accordance with the Council's travel regulations for contractors and advisory committee members, for the purpose of attending Committee meetings as authorized by 5 U.S.C. §5703. The Executive Director shall determine who public members are.
- 14. <u>Duration:</u> The System Analysis Advisory Committee will terminate two years from the date this Charter sadopted, unless renewed in accordance with the Federal Advisory Committee Act.

This Charter for the System Analysis Advisory Committee was approved and adopted at a duly noticed meeting of the Northwest Power and Conservation Council, June 12-13, 2018 in Portland, Oregon.

NORTHWEST POWER AND CONSERVATION COUNCIL

By:

James Yost, Chair